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Indian Famine Commission, 1898.

APPENDICES, VOL. VI.

EVIDENCE OF WITNESSES

FROM THE

PUNJAB

TAKEN BEFORE THE

INDIAN FAMINE COMMISSION, 1898.

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Indian Famine Commission, 1898.

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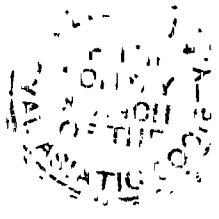

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INDIAN FAMINE COMMISSION, 1898.

MINUTES OF EVIDENCE

TAKEN BEFORE

THE COMMISSION

APPOINTED TO FORMULATE FOR FUTURE GUIDANCE THE LESSONS WHICH THE FAMINE EXPERIENCE OF 1897 HAS TO TEACH.

At the Lawrence Hall, Lahore.

FORTY-EIGHTH DAY.

Monday, 4th April 1898.

PRESENT:

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (PRESIDENT).
SURGEON-COLONEL J. RICHARDSON.
MR. T. W. HOLDERNESS, C.S.I.
MR. T. HIGHAM, C.I.E.
RAI BAHADUR B. K. BOSE, C.I.E.
MR. M. W. FENTON (*Temporary Member for the Punjab*).
MR. H. J. MCINTOSH, *Secretary*.

CAPTAIN J. R. DUNLOP-SMITH, Director of Land Records and Agriculture, Punjab, called in and examined.

Capt. J. R. Dunlop-Smith.

4th April 1898.

I put in a written statement of evidence.

1. My experience of the late famine was confined entirely to the district of Hissar. I gave over charge of that district on the 5th October 1897 and took over charge of my present duties on the 15th idem. I have had therefore no opportunity of forming any opinion of famine matters in any other part of the Province.

2. The following departures from the prescriptions of the Punjab Famine Code occurred during the currency of operations :—

(*a*) The supervision exercised over the excavation of tanks, which is regarded as a "small work" (see paragraph 25), was not professional. These works, on which 35 per cent. of the total cost of relief works of all kinds was spent, were constructed solely through Civil agency. There was no professional supervision. Thus the provisions of paragraph 26 were not carried out.

(*b*) At the commencement of famine relief operations, my predecessor started various small works, chiefly tanks, as test works, but shortly after I took over charge I stopped all the small works, with the exception of one or two tanks in isolated tracts, and did not re-open any until some months later, when the large works began to show signs of giving out. This procedure was against that laid down in paragraph 29 and in the last sentence of paragraph 106.

(*c*) The services of Kanungos were not utilised in the manner prescribed in paragraph 70. It not unfrequently happened that one relief circle was split up between those of two separate Kanungos. But, apart from that, it was felt to be imperative that the Tahsildars should be in close touch with the Inspectors, and that there should be no one between them. The Kanungos were employed solely in checking the weekly returns of the Patwaris in their circle and the accounts of gratuitous relief operations and tank excavation.

(*d*) The Circle Inspector had nothing to say to the wages on the "small" relief works, whether tanks or roads. It was soon found that his hands were quite full with his work in connection with the issue of gratuitous relief and the other duties laid down in paragraph 74.

(*e*) No power was given to the Circle Inspector under sections 90, 91 and 92 to either add new names to, or remove old names from, the Gratuitous Relief Register No. 4. When necessity arose, he reported the names with the circumstances to the Tahsildar, who referred the reports with his own remarks to the Assistant Commissioner or Extra Assistant Commissioner in charge of the particular tahsil. In the same way the sanction of the Assistant Commissioner or Extra Assistant Commissioner had to be obtained to the addition of "other persons" under section 89.

(*f*) New arrivals on relief works were classified according to the provisions of sections 115 and 116, and the vast majority were put into either the B or D Class. But as soon as work began it rested entirely with each worker as to which class he should belong. Every one who performed the A task got the A wage, and if a B Class worker would not do a B task he got the lower wage. Thus the original classification was given up as soon as the workers had been a few days in the camps. Payments were made by results, and the workers were freely moved from one class to another as they varied their output.

(*g*) The cash wages prescribed under section 126 were soon given up, as the abuse of the system was found to be so difficult to check. If the condition of the fresh arrivals seemed to call for immediate relief, they were given grain doles.

(*h*) The Sunday wage was not given on every work. It was issued or withheld in particular cases under the direct orders of the Deputy Commissioner, who was guided in his decisions by (*a*) the condition of the majority of the workers, and (*b*) the relation of the rates of the cash wages to the grain equivalent of the famine rations.

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4th April 1898.

(*i*) Attempts to erect huts were soon given up because of the danger of fire and the dislike of the people to the arrangements prescribed in the Code. Each family was given one or two thatches (*sirkhs*) and was allotted a site. They then made what use of the thatches they pleased.

(*j*) The Circle Inspector had nothing whatever to say to the management of small works as prescribed in section 155 [see (*d*) above].

(*k*) Wages were paid throughout on the system prescribed in sections 174 and 175, but the ready-reckoner was used to ascertain only the daily wage of an A Class male. If that happened to work out to odd pies the wage was fixed at the nearest pice and the wage of each of the other classes was expressed at one pice lower than that of the class immediately above it. The female wage in each class also was one pice lower than the wage of the corresponding class of males.

(*l*) It was found that the provisions of section 258 conflicted with the instructions laid down in the Resolution of the Punjab Government, No. 86, dated 23rd April 1896, prefixed to the Code, and in the case of one town, Bhiwani, where a sum of R4,883 was raised locally, the local Committee refused to credit the amount to the fund in the Treasury, but at the same time they expended it on the lines laid down by the Deputy Commissioner for the issue of relief in towns.

3. (*a*) The causes which led to the famine have been described at length in the report on famine relief operations in the Hissar district, and from the statistics given in that report some idea may be formed of the extent to which distress prevailed. It is not easy for me to say exactly what degree of success attended the measures taken to cope with that distress. Only three persons are known to have died from the immediate effects of hunger. Two of these belonged to Bikanir and one to Hissar. Four persons died from the immediate effects of thirst, and all four of these belonged to one or other of the Native States on the border. During the hot weather months we had an extensive system of water-supply for travellers all over the district, but this was known only to residents of British territory. Immigrants did not know where to look for water. Considering therefore the magnitude of the distress in Hissar, the peculiar physical difficulties of the country, and the number of emaciated immigrants from Native States, we may claim that the efforts to save life were highly successful.

(*b*) It is more difficult to give a categorical reply to the question whether the general distress was met by an adequate scheme of relief. I am of opinion that our operations were eminently successful in this respect, but I was so closely identified with these operations that I cannot give an independent opinion. I can only say a subsistence wage was provided within a reasonable distance of their villages for all who were able and willing to work for it, and those who were unable to work were relieved either in poor-houses or at their own homes. When the monsoon broke and favourable rain fell all who were able to furnish security received advances for the purchase of seed and cattle, and over 26,000 persons who could furnish no security received gifts from the Charitable Fund for the same purpose. The margin of misery which Government could not touch was dealt with by the local Charitable Relief Fund Committee, the operations of which are described in Mr. Butler's report, which has been printed as an Appendix to the Provincial Report.

During the famine 10,750,052 daily units were relieved on works at an average daily cost per head of annas 1-4·97. Of these 1,759,336 or 16·3 per cent. were dependants on the workers. 1,315,283 units were gratuitously relieved in their own homes at a daily average cost of pies 11·80 ; 87,508 units were relieved in poor-houses at a daily average cost of annas 1-6·9. 40,213 units were relieved by being given spinning, grinding, etc., to do at a daily average cost of annas 1-1·97. The total number of daily units relieved in one way or another was 12,193,056 at a daily average cost per head of annas 1-4·43.

In addition to the money spent on actual relief a sum of R4,41,290 was advanced to agriculturists on the usual terms for the purchase of seed and for the purchase or hire of cattle. The number of persons who received these advances was 41,610.

(*c*) 224,856,242 cubic feet of earth-work were excavated on the relief works by 8,990,716 daily units, so that the average daily task performed by each worker was 25 cubic feet. The average cost of excavating 1,000 cubic feet was R3-15-3, taking the workers' wages alone into account. If we include the cost of the dependants' relief, this rises to R4-3-7, and according to the total sums spent on the works the cost is R4-13-1.

4. (*a*) Experience in the Hissar famine proved that the construction or repairing of unmetalled roads was almost useless except as a means of keeping applicants for famine relief employed. In future famines I would start work on two or three of these roads in different parts of the district as test works. The work would be carried on under the provisions of the Code except that relief should not be given to dependants, and there should be no Sunday wage. If the attendance on these roads showed the existence of real distress, I would then close them and open camps on one or more of the large works on the programme which, when completed, would be of undoubted public utility. I would keep tank work strictly for the hot weather. In Hissar "famine" always begins after the failure of a *kharif* harvest. The *rabi* crop is too unimportant to have much effect one way or another on a famine. Once famine has declared itself, it will undoubtedly last at least till the following monsoon. The value of tank excavation can hardly be exaggerated, but it should be kept for the time when it is advisable for sanitary reasons to break up the large camps, when all classes of officials have become thoroughly acquainted with the principles and the working of famine relief, and when it is highly important to attract the people back to their villages.

(*b*) I think all dependants, whether adults or children, should be supported in kitchens. These kitchens should be opened at the same time as the work to which they are attached ; otherwise they will fail of their object. If a work is so large as to require several camps at some distance apart, one kitchen will be found ample for two camps.

(*c*) There should be only one class of working child. These should be employed, wherever possible, on other work than that of the adults.

(*d*) I am of opinion that the present Code classification is too elaborate. That proposed by Mr. Higham is appropriate, but I would qualify it in the direction indicated in my note on that officer's report.

(*e*) I would recommend that wages be calculated on the system explained in the note referred to in the preceding sentence (*b*).

(*f*) I would define the term "nursing mother" more clearly than is done in paragraph 116 of the Code. I do not think that if the child at the breast is more than a year old the mother should receive a special wage.

(*g*) I think that the keeping up of Register No. 8 should be made compulsory. There is no surer guide to the extent and development of the distress than the numbers of the various castes on the works at different periods. These statistics are much more valuable than the mere fluctuations in numbers. I would go further and prescribe a weekly return showing the total numbers of applicants of each caste and the numbers belonging to (1) the district, (2) other British districts and (3) Native States.

(*h*) I would combine Forms Nos. 9 and 10, and on the combined form would show the amount of task performed.

(*i*) I would do away with the monthly reports from districts (paragraph 66 IV—VI.) These can be easily compiled in the Secretariat from the weekly reports.

(*j*) I would alter the wording of paragraph 94. The difficulties of giving relief in grain were found to be very great in Hissar.

(*k*) I think the subject of advances for the purchase of seed and cattle towards the conclusion of a famine should be treated more fully than has been done in paragraphs 48 and 50 of the Code, which by their brevity rather minimise the great importance of this class of assistance. It is certainly alluded to in paragraph 8 of the Government Resolution prefixed to the Code, but the ordinary procedure prescribed for the issue of these advances is too cumbersome and lengthy to be employed with any effect in a famine, and some modification appears necessary.

(*President.*)—Who was in charge of the Hissar district before you ?—Kazi Muhammad Aslam Khan.

In what month did distress begin to be apparent in Hissar ? When did it begin to be first apparent ?—It began before I took over charge of the district in, I should think, June 1896. I was not in India at the time. I am speaking only from memory.

Were any relief works begun then ?—No; no relief works were begun then. Test works were begun just before I

went there. Regular relief works were begun one week before I went there.

In what month were test works begun ?—I think in the beginning of September 1896 as soon as the failure of the monsoon was absolutely declared and there was no hope of saving the crops.

On what system were test works carried out ?--They were carried out on the system prescribed by the Code.

Were the test-works under professional supervision or under civil agency ?—Entirely under civil agency.

Regular relief works on large works, was that begun under professional agency ?—Yes, under professional agency.

When did village gratuitous relief begin ?—At the beginning of 1897 as far as I can remember. It was begun in each tahsil at different periods according to the necessities of each. I find on looking at my report that gratuitous relief was started in the Sirsa Tahsil in the last week in January, and was gradually extended till in the middle of March it was in full working order in every relief circle.

Was relief extended to those parts of the district protected by canals ?—It was, but it was not carried out to the same extent ; not by any means in the same proportion to the total population as in the villages not protected by canals.

Was it carried out more or less throughout the whole district ?—It was.

What was the organization of village relief ? Were Kanungo Circles treated as relief circles, or were extra men appointed ?—No, relief circles were conterminous with zails, and as a rule zails in Hissar (there are on an average four zails in a Kanungo Circle) are conterminous with Kanungo Circles. The Kanungo was the checking officer who checked the accounts. Zaildars were employed almost entirely. If a Zaildar was inefficient another man was appointed, but this was rarely the case. Any man appointed to be what was called a Circle Inspector was not paid at all. The work was done for nothing by men of the Zaildar or Lambardar class. They did their work very well indeed. The Patwari was practically clerk to the Circle Inspector. He helped him with accounts and clerical work, and when he was so employed the Lambardar did most of the work, and the Kanungo supervised the work of the Patwari just in the same way as he supervised his work under ordinary conditions. The next officer after the Kanungo was the Tahsildar. The Naib-Tahsildar was employed in very rare cases because he was generally occupied on relief work or on other special work (supervising tanks, etc.) as a sort of Civil Relief Officer. We had eleven extra Naib-Tahsildars at one time. For eight months we had eleven extra Naib-Tahsildars for the whole district.

How many Tahsildars ?—Five.

So you had 16 altogether ?—Yes.

Had you any Sub-divisional Officers ?—We had a Sub-divisional Officer at Sirsa, and he was given another officer to help him in his ordinary work and so set him free for famine work. He was still the Sub-divisional Officer, and the extra officer (an Extra Assistant Commissioner) did the ordinary routine work.

Had you any assistance in the rest of the district ?—Yes, we had two extra officers during the famine.

What staff did that give you in the way of Assistants ?—It practically gave me the services of two extra officers, one of them under training with 3rd Class powers only. The other was a full-powered officer, but the ordinary work increased also during the famine, and he did both famine work and ordinary work. Practically speaking, we had the services of two extra officers at head-quarters during the famine.

What is the ordinary staff of the district ?—The ordinary staff in Hissar is—one officer (Deputy Commissioner and District Judge), one officer for the Sirsa Sub-division (1st Class powers), two officers (1st Class Magistrates) at head-quarters, and one 1st Class Magistrate for six cold weather months only. Of the Magistrates at head-quarters, one acts as Sub-Judge and hears petty civil appeals, and one acts as Revenue Assistant.

What staff had you during the famine ?—In the famine we had one officer (Deputy Commissioner and District Judge), one officer for the Sirsa Sub-division (1st Class powers), one ditto (1st or 2nd Class powers), and four officers at head-quarters with 1st Class powers. This staff was kept up from 1st November to 1st May, when it was reduced by one 1st Class Magistrate at head-quarters. On the conclusion of the famine the staff was reduced to its normal proportions.

You found that staff sufficient ?—Yes. I think it was. All were over-worked, but nobody broke down.

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You had great advantages, did you not, as compared with some parts of India, in having a Zaildari agency ?—I do not know other parts of India, but the Zaildari agency was an enormous advantage. The organization did not break down ; there was no peculation whatever in gratuitous relief that I discovered, and that was more closely supervised by myself and the Civil Relief Officers of the district than any other part of famine work. There were certain cases of perhaps callousness to suffering, perhaps laziness, but these were very very few, and the work was extremely well done.

In putting people upon gratuitous relief did you act in accordance with the Famine Code ?—Yes, strictly in accordance with the Code. But we made a departure in one way, and that was with the respectable poor, who would not take relief openly. We had a great deal of anxiety about them, and finally the District Charitable Relief Fund consented to take these off our hands altogether. The numbers were very few indeed, but we felt it better to keep them out altogether from the Government scheme of relief.

Mainly in towns or villages ?—Mainly in towns and large villages. I do not know of any in small villages.

What class of people were they, these respectable poor ?—Sayyad widows of old Sayyad families who had come down in the world. They were chiefly Mahommedans. The percentage of Hindus was very small. Also some Ranghar families.

Are there people called Vishnois in Hissar ?—Yes.

How did they get on in the famine ?—They were the last caste, except Deswali Jats, to come on to the works in any appreciable numbers about the end of April and beginning of May 1897. This showed that things were getting really bad.

Had they very great objection to the slaughter of cattle ?—Yes, and we had considerable trouble with them over cow-killing, because the country there is a great Pachada tract, and the Pachadas insist on killing cattle. But we got over the difficulty by separating the two camps.

You had piece-work in your district ?—No, no piece-work: all on the Code system, unless it can be said that *kankar*-digging was done on piece-work ; but very little *kankar*-digging was done.

Were the number of women and children very large on the works ?—Not abnormally so. The percentage of men who attended the works was 42 and the percentage of women was 38 and children 20.

That is working children ?—Yes, Sir.

But the adult dependants, were they few who came on the works ?—Their percentage was very small compared with children.

Working children, were they numerous ?—Yes.

Had you ever any reason to suppose that other children besides the children of actual workers came on relief works ?—We constantly met with instances of that. This practice did obtain on large works, such as the Ghaggar Canal, and a good deal of the time of the Civil Relief Officers of the Naib-Tahsildar class, attached to the works, was taken up in fighting against this.

Were they the children of friends ?—Yes, entrusted to their care.

Why do you suppose parents did not come themselves ?—What generally happened was, parents worked on tanks started fairly close—five miles off. We had no relief dependants on tanks, as people were interested in having their tanks dug, whether there was famine or no famine. It suited persons to work on tanks, and one person took two or three families on to the relief works. Instances of the kind were not very common, but still did exist and existed on every work.

There was no great harm in that ?—Except the moral effect, and it cumbered the works. The Engineers complained. It ran up the cost, and the moral effect on the people was not very good.

What did non-working children get ?—They got two pies or one pice. On the Ghaggar Canal we began with the Code allowance, which was two pice. On the next very large work (the Fatahabad-Tohana Road) and subsequently on the Rangoi Channel they got one pice, but the effect of this was watched, and I think I am right in saying on the Rangoi we had to increase to two pice later on for a time.

Why was it reduced to one pice ?—It was reduced with the object of preventing too many coming on to the works.

(*Mr. Holderness.*)—What did you do about turning pies into pice in wages of all kinds ?—We paid people in even pice, and the system we followed was this. On all works, except tanks, we worked out from the ready-reckoner in Appendix D what the wage of a male of Class A was, and

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we took the nearest pice to that. If it was Re. 0-2-2 we gave Re. 0-2-3; if it was Re. 0-2-1 we gave 2 annas. On tanks wages were fixed by myself and fluctuated with the grain. I simply issued orders. The wages there also were paid in full pice. If it was 2 pie, we counted it as 3. Anything under 2 pie we counted down to the next pie.

The workers lost a little by this conversion of pies, did not they?—On the whole I think they did. I am not quite sure. Of course they gained by being paid according to the ready-reckoner instead of according to the other system prescribed by the Code—the grain equivalent system.

You adhered I think always to the grain equivalent system: you did not go into the actual price of the condiments?—No, never.

Were a large number of the workers on any of the works paid according to Class D wages (minimum wages), or did they generally earn A or B wages?—The percentage on Class D wages on the works, taking all the workers, men, women and children, was 15·9, practically 16 per cent.; and Class C 12·3.

(*Mr. Higham.*)—Excluding dependants?—Yes. Class B were 56·4 and Class A 15·4.

(*Mr. Holderness.*)—Is that including working children?—Yes.

According to the statement for March which shows your classification, out of 41,000 workers, including working children, you have 1,490 in D, which seems less than the percentage you have given us?—Of course it varied a good deal.

(*President.*)—The D Class was largest at first?—Yes.

(*Mr. Holderness.*)—When was your highest time?—June.

(*President.*)—Virtually these Classes A, B, C, and D were paid according to results?—Entirely.

Not according to physical conditions?—No.

(*Mr. Holderness.*)—Taking the general statement, out of a total of 64,000 workers, including working children, you have got under 6,000 in Class D, very few in C and the bulk in B, and a certain number in A. Does A include mates?—Yes.

(*President.*)—Do you think that the power that they had of working up into Classes B and A had a good effect?—It had morally: I think it had to a certain extent.

I suppose particularly in the case of people inclined to cheap meat. This enabled them to save a certain amount of their wages?—I should think cases of savings were very very few indeed.

Do you know what price cheap meat was on the works—among the Pachadas and Chamars?—I don't think I can give an answer to that question: it was very much complicated by cattle theft: so many cattle were stolen and the price of meat fluctuated according to facilities for theft in a most extraordinary way.

Were cattle sold for their hides to a large extent?—No; not by Hindus, never. When a man who had stolen an animal killed it, he and his family ate the flesh, and then he tried to turn a dishonest penny by selling the hide.

(*Mr. Holderness.*)—Was the export of hides from the district very large?—Yes, for a Hindu district like Hissar it was quite abnormal.

(*President.*)—Was there any other cheap food that the people could get besides cheap meats to supplement their diet with?—Yes, jungle berries. A common jungle berry was the *kair* berry, which curiously enough blossoms twice a year when there is a famine. Its use resulted in all sorts of bowel complaints, but it was an enormous stand by, that and the *jand* tree pods. Latterly when the rains did come the people used a great many natural grasses that sprang up.

I understand your opinion is that the Code wages were not in any degree too high?—I don't think so.

Had you poor-houses?—Yes.

What was the condition of people in poor-houses?—At first when they were opened, there was very great objection to them, and only people who were seriously ill or had annoying forms of disease, such as guinea-worm, came to them; but as famine wore on, a great many more came, and it was in poor-houses that almost all cases of emaciation were met with. The condition of the people in the hot weather was very bad indeed.

Were they generally people of the district or were a large number of them people from other districts?—More than half the total number of admissions to poor-houses were from Native States, chiefly Bikanir and the Southern Rajput States. The percentage of Sikh States was very small.

I suppose that as long as people in poor-houses were suffering from diseases of some kind they got special diet?—Yes. The Doctors had to attend poor-houses a great deal more than is generally supposed. They had to be visited almost every day. In cases of contagious disease the people were isolated. Almost everybody in poor-houses required medical treatment.

I suppose almost everybody had special diet?—Practically so.

(*Mr. Holderness.*)—The scale of diet at Hissar poor-houses as shown at page 58 of the Punjab Famine Report appears to be very much higher than the Code scale. Was that introduced from the first or merely after experience?—It was introduced entirely on the orders of the Civil Surgeon of Hissar.

Did he think the poor-house Code scale insufficient?—Yes.

Is that your opinion too?—Well, it is hard for a layman to give an opinion on a subject of this kind. Myself, I think he was inclined to be too liberal. A large allowance of vegetables was made.

Was the hospital separate from the poor-house or attached to it?—No, we had the poor-houses in tahsil towns quite close by. In one case it was in the dispensary compound.

It seems to be the poor-house was a hospital practically?—It was, but it is I think laid down in the Code that the hospital was to be in close proximity to the poor-house. I always had the poor-house as close to the Tahsil Dispensary as I could.

(*President.*)—When people had anything like contagious disease, were they segregated?—Yes, they were put at a distance. Also in cases of child-birth.

(*Mr. Holderness.*)—Did the people eat all that was given them?—Yes, we kept a strict look-out after the accounts of our poor-houses. I did not find any cases of embezzlement.

Rather difficult, wasn't it, for them to digest such food when they came in such poor condition?—They got graduated food when they came emaciated. An appreciable proportion of the people were fed on milk and easily digested food.

(*President.*)—In the case of these emaciated people who came in and were treated in poor-houses, was the Civil Surgeon successful in restoring them to strength and health?—He was in all but two cases which I have alluded to in my report. They could not do anything with these, and the people died.

These were not the only deaths in poor-houses?—No. These were the only deaths from actual starvation. Medical efforts were successful.

Were there kitchens for children at any time on the works?—There were on the Ghaggar Canal only. These were introduced in order to prevent an improper number of children being brought on the works.

For that reason only?—And to reduce the dependants who were not really necessitous.

Was there any objection generally to sending children to kitchens?—The people objected.

Did any particular class object more than others?—I did not notice that.

When kitchens were introduced, did non-working children fall off greatly in numbers?—They fell off in those camps where kitchens were introduced. Yes, certainly. I would not say they fell off greatly, but they fell off appreciably.

You gave or did not give the Sunday wage according as you thought people could do without it apparently?—Yes.

Was work always stopped on Sunday?—There was never any work on Sunday.

You say that attempts to erect huts were soon given up, etc. May I ask why these arrangements were so unpopular?—The huts were very large, and in order to make as much use of them as possible we had to put several families into one hut, and they objected to herding together, and to being prevented from smoking or cooking inside.

Were there any other camp arrangements which the people objected to?—They objected to fixed latrines.

The village tank works that you started at the beginning of the hot weather, were these ponds attached to villages in those parts?—Yes.

That was a very popular system?—Extremely so.

Do you think the advantage of deepening them very great to the village?—Very great indeed. It is hard to exaggerate it. There were no wells.

Have they the system of having wells close to the tank?—Yes.

Wells away from tanks are generally brackish?—Yes, and the water-level for the greater part of Hissar is so low that they cannot make them.

(*Mr. Higham.*)—One hundred and fifty feet?—It runs up to 200 feet, and even then the water is brackish.

(*President.*)—You said very few people came from the Sikh States. Was relief organized in the Patiala, Nabha and Jhind States?—I don't think so. Not at all as far as I know.

The people were well enough off to carry through?—Their crops did not suffer anything like in the same way as they did in Hissar.

The Sikh States did not take any measures to prevent the export of grain?—Not that I know of.

Was distress great in those detached portions of territory granted to the Sikh States after the Mutiny?—No, it was not. I could see from the condition of our own villages in the Budlada tract which is surrounded by this territory that the distress there was nothing like what it was in Hissar.

I see Gurgaon escaped wonderfully?—Yes, and then again parts of Ferozepore were as bad as Hissar.

And the Sikh villages which adjoin Rajputana?—I do not know about those parts. I did not hear of any particular distress down there. I will say this that the Jhind people who came in and who formed one per cent. of all forms of relief, all came from that part; none came from Jhind on the north.

You did not attempt the system of giving advances to villages for the clearing out of their tanks under the *takavi* method?—No.

In some parts of the North-Western Provinces and Bengal the system of clearance of tanks was adopted with great success apparently. Do you think that system could have been worked in Hissar?—That system or one resembling it is worked in ordinary years. The District Board frequently make a grant of part of the money, sometimes as a gift and sometimes as an advance, according to the pleasure of the Board. The distress was so great in Hissar that it would have been very difficult to recover from the people any part of the money spent on tanks.

I suppose as it happened you only cleared out a certain percentage of village tanks?—We dug about 60 per cent. of the tanks.

(*Mr. Holderness.*)—I see that 555 villages were operated on?—Yes, 55 per cent. of the total of the villages in the district.

(*President.*)—Were those selected which you thought most required work?—The selection was made by myself after consultation with tahsil officers, and we selected them in the worst tracts and parcelled out works in progress all over the district.

I suppose in Hissar and Sirsa generally the number of agricultural labourers compared with the number of tenants is rather smaller than in most districts—I mean the number of kamins?—Yes, I think it is smaller than in other parts of the Punjab. A large number of the tenant class and some proprietors came on the works. A very large number comparatively. The proportions are—of the total number relieved on relief works 15·5 belonging to the Hindu land-owning castes; 21·6 belonging to the Mahommedan land-owning castes; 38·9 village menials excluding Dhanaks; and the rest were miscellaneous castes.

Where did the tenants come in from?—Well, I had no means of knowing which were tenants and which were land-owners. I did it by castes.

What do you think the net result of the famine is? Have the people recovered now, or to what extent have they not yet recovered their spirits?—To this extent that their agricultural live-stock is still very much below what it ought to be, and they have not yet begun to accumulate stores of grain. Beyond that I don't know that there is anything else.

Was there much sale of brass-pots and jewellery?—There was not much sale of household utensils, because they got nobody to take them, but there was a considerable sale of jewellery.

Was there much borrowing or was borrowing stopped?—Borrowing did stop I think very largely about the spring of 1897 and did not recommence until the rains had assured the prospect of the *kharif* of 1897. Very little borrowing indeed went on during the last three or four months of the famine. The *banias* would not give any money.

When fodder famine began did people send away their cattle to a distance to any large extent?—Yes, my predecessor encouraged them to do that. A very large number of cattle went away across the Jumna, and some went to Jodhpur where there was some fodder.

Did many cross the Jumna to the Terai?—Yes.

Do you think they succeeded in saving their cattle?—I don't think that they saved them very much. I know I heard complaints from people that they had got word that some of the tracts they had gone to were badly off for fodder too.

It was always a custom to send cattle down to the Bikanir desert and Jodhpur way?—Yes, always a custom. I was rather surprised just before the rains broke, when I was out on tour near Kairu, to meet large droves of cattle coming out in anticipation of the monsoon. They had come from the Baoni Ilaqua near Loharu in the Rajputana States. But fodder was restricted there too no doubt very much.

Did the cultivators and proprietors who came on the works often bring their cattle with them?—I saw some cases of their bringing camels with them, but none of cattle.

I suppose there were hardly any cattle left in the villages?—Very few. Most had gone away or been killed.

(*Mr. Holderness.*)—Have you verified the statement made by you at page 12 of the Appendix, namely, that only 15 per cent. of the plough and well-cattle were left in the district?—Yes, it is according to data at my command.

Had they perished or hadn't then returned from grazing-grounds where they had gone?—I don't think more than one-fifth came back.

In spite of that was a full *kharif* area sown?—Very nearly.

I think you mention that a full *kharif* was sown?—It was enormous the amount of *takavi* we gave out.

(*President.*)—In what month did you give out this *takavi*?—The distribution began on the 16th July.

Was that Government *takavi* or charitable relief?—We gave nearly 4½ lakhs Government advances and R2,35,000 of charitable gifts.

Was there great storing of grain among the people in Hissar and Sirsa?—I was quite surprised to what extent this was carried. This is a great custom among zamindars and *banias*. I think they used to store a couple of years' supply. I counted at the beginning of the famine 16 months' supply in the district: sufficient to feed the district for 16 months; but they went on exporting.

How do the zamindars and tenants store grain?—In pits as a rule.

Is their custom tending to diminish?—I think it is.

I see you say in paragraph 4 (*b*) of your written evidence that you think "all dependants, whether adults or children, should be supported in kitchens." Do you say that in order to keep down the numbers?—I suggest it as a test.

Did you see any reason to think that non-working dependants were entirely neglected as regards food by the heads of the family?—No. I never met with instances of that kind; nor did I ever hear any complaints of that. I was very much struck all through the famine with the way in which the families supported each other.

Where was the line of division put between a child and an adult in Hissar?—I followed the Code.

If you had to fix the line yourself where would you fix it at—12 or higher?—I would say 14 or 15.

Where would you fix the line if you had to decide it between working children and non-working children—at 7 or some other age?—I think I would put that two higher, at 9.

Are working children in the way on the works?—There is no doubt they are a nuisance on the works everywhere, except where there is an officer in charge of the works who sees that they do not interfere with the work.

You say that generally on the works there was no surplus of carriers?—As a rule that was the difficulty. There were never too many diggers.

That does not look as if there was a surplus?—Some men were not fit for digging, but the main reason was the lead was so very small as a rule. On the farm ditch it was a very difficult thing. There was practically no lead whatever.

Was that ditch completed all round the farm?—It is completed all round the upper portion of the farm.

(*Mr. Holderness.*)—I see on page 55 of the Provincial Famine Report it is said that apparently you are opposed to kitchens. Is that a mistake?—No, I don't like kitchens. I am certainly opposed to them as we had them in Hissar, because we did not start them with the beginning of every work and in every camp on that work.

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You introduced them later?—Yes, when it was found that dependants were gradually rising.

By whom were they worked?—They were worked by the Civil agency and not by the people who were responsible for the works. I think they ought to be worked together and they ought to be opened with the work.

Then you regard them as necessary?—Yes, if I had this famine to go through again, and we opened the Ghaggar Canal, I would start them at once as each camp opened.

Simply in order to keep the dependants down?—Yes.

Then on small works what would you do—pay dependants?—That would depend on circumstances. I would lay down no rule for small works. For instance we never had any dependants on the Bhiwani water-works.

You mean in some cases you would not have dependants at all. Would you have dependants on village tanks?—Never.

(*President.*)—In the cases of old women who were unfit for work, were they put on the relief list?—Not unless they fulfilled the conditions laid down in the Code, *i.e.*, if a son was on the work that would be sufficient.

You relied then upon the people being able to support their dependants?—Yes.

(*Mr. Holderness.*)—Apart from not paying dependants on tanks, did you pay a lower scale of wages or the same scale?—Very much the same scale—the B and D wage—two rates for men and two rates for women. It was practically the same.

How did you exact task on the tanks?—By the system of the *jhool*. Every zamindar knows what the *jhool* is. His standard of measurement. It is 3 cubic *haths*.

Who measured up and by whom was the task enforced?—The first thing we did was to put a sub-overseer or the district *mistri* in charge of three tanks, and he went round these three tanks inspecting one every two days or every tank twice a week, and measured up. Then latterly the Revenue Extra Assistant Commissioner made a very good suggestion which was to do away with even the small establishment we had by making the Muharrir or Patwari do the work, and this man was trained by the Public Works Department to measure up. One man on each tank did the clerical work as well. He was checked by the Naib-Tahsildar and other Civil Officers.

I suppose you had a couple of hundred going on at once?—For a month we had very nearly 250.

(*President.*)—Did useless people do any work?—A certain amount: official supervision was very close.

How frequently were tank workers paid?—They were paid generally every day.

(*Mr. Holderness.*)—How did you arrange for money reaching these many spots?—The Lambardar, who was generally the officer in charge, was paymaster with the *bania* to help him. He was told what amount had to be given for a certain tank. I never gave him more than ₹200 at a time. He brought the cash from the tahsil himself.

Was there much fining for works on tanks?—No. The labourers of the village community took good care that every one did his full task.

Did you allow a certain sum of money beforehand for excavating a tank?—Yes. Calculated roughly on the amount that would be required.

If that was exceeded you did not make zaminders responsible?—It never was exceeded. When it was the workers had to go home.

Then you started with your big works and kept tanks for the hot weather?—Yes.

Was there a great rush to the tanks?—No.

Tanks were more popular than big works?—Naturally, yes. They were not more popular with outsiders, but with labourers.

Then they were generally people of the village?—At first they were. As bigger works fell in others had to come.

At page XXIX of the Famine Report Captain Parsons makes a suggestion about which I should like your opinion. He says: "The tank system finds great favour in my mind, and in order to render it acceptable to zamindars, and in order to prevent this class of labour from quickly giving out, I am inclined to let it be known that 'tanks' are for the zamindars, and for *kangals* the 'roads.'" Did you attempt anything of this sort?—No.

What do you think of the suggestion: is it a practicable one?—Not in a bad famine. I don't see how it could be carried out in practice.

You would have your big works for *kamins* and the labouring class and tell them to go there, and keep tanks for the more respectable people in villages?—I don't think that could be worked out in practice. The plan we adopted in Hissar was to keep tanks for the hot weather with various objects, one of the chief of which was to attract people and get them back in their villages.

In that case you really gave up your big works?—Yes.

(*President.*)—In some parts of the country it has been proposed by many officers that there should be only large works in each district, and that everybody requiring relief by way of relief work should be told to go to these big works. It has been objected to that, that cultivators and small proprietors cannot go to distant works without leaving their cattle and their houses and without giving up supervision of what little fields they have which is necessary, and it is suggested that in making out lists of people entitled to gratuitous village relief we might go further and make out a list of people who, for certain reasons, were considered entitled to work nearer home, and that people of that class should get a sort of *chalan* or order to allow them to work on works near villages, and the rest of the people should be ordered off to the big works at a distance. The question is whether that is practicable?—I don't think it is practicable. It is not required in the Hissar district.

When you went to the district were small works going on and no big works?—Yes.

Did they clamour for tanks?—Yes. I had difficulty in going on with my plan. I was besieged with demands for tanks because they wanted to get labour near their villages.

Tanks were very popular?—Yes.

If you opened small and big works, you would have difficulty in getting any one to go to big works?—Yes.

If you had tanks open at first, you would have no test?—Quite so.

Afterwards you did not mind tanks because you were convinced that the people wanted to work?—Yes.

Did the more respectable cultivators reside on the big works to any extent?—Yes.

(*Mr. Holderness.*)—You said that relief workers had full power of working up from one class to another. Was that the case with the carrier?—Yes.

Then the bulk of your carriers must have been in a higher class than D Class because you had very few in D?—Yes, a "B" woman was in a higher class.

(*President.*)—If a man went up from B to A Class, did he carry up his women with him?—Yes. I think that was the rule.

I see some officers in the Punjab thought the grain equivalent sometimes too liberal?—Yes, I think it is rather liberal, and it enabled me to do away with the Sunday wage very often.

If you worked out the wage according to the money and grain equivalent system, money would be smaller, very much smaller?—Certainly it would on the whole.

Had you on the works any system of caste segregation?—As a rule gangs were separated according to caste; but there was no hard-and-fast rule. I have seen men of the zamindar caste working in the same gang with Chamars.

Were your wages reduced with every change of price?—Yes.

For small changes?—No; not for small changes of one or two chattacks. A 10 per cent. variation was allowed. We followed the North-Western Provinces system.

Were there any public works or relief works going on in the district?—The Southern Punjab Railway ran right along the north of the district, and it was thought that that would be the direction in which our first relief works would have to be opened.

Besides the Southern Punjab Railway there were no works started there till some time after the Railway was finished?—Some months after.

Did the Railway give all the relief that was necessary?—Yes.

Work was given out under the ordinary contract system?—Yes.

Were rates raised?—I don't think so. In addition to giving labour the Railway put a very large amount of money into the district.

The Railway was really an instance of piece-work—contract work?—Yes.

In this instance it seems to have proved sufficient?—Yes; all through for the particular tract it affected.

Can you give an opinion as to the possibility of utilizing piece-work for famine relief work?—I don't like giving an opinion, as I have never had any experience of piece-work. I don't think it would be of much practical value. Probably piece-work would do very well at the opening part of the famine, just as the Southern Punjab Railway gave support at the first part of the famine. I don't think piece-work would have been anything like sufficient.

Do you think the provisions of the Code regarding the minimum wage and payment for dependants are demoralizing to the people?—There the personal equation comes. If you have an officer in charge who can deal with the people and understands them you won't find many people on a minimum wage.

I suppose the personal equation comes in as regards the people?—But even more, sir, with the officer.

I think the able-bodied men objected at first to the Code wage?—Yes.

On the other hand, collective families used to earn a good deal?—Yes, but I don't think instances of that kind were many.

If the wage for able-bodied men is very low and collective earnings for a family are high, it may pay able-bodied men to come on the works and send their women and children elsewhere?—Yes, at one time I came across a few instances of that on the Rangoi Canal. Several of the able-bodied men left the Rangoi works and went across the border and worked in Patiala on some public works being carried out by the State.

The Code system does not hold out any great incentive to the digger to exert himself?—No, I don't think so. I say you will get good work out if you put good men in charge.

To what extent have works been carried out in the district apart from tank works?—The Ghaggar Canal was of the greatest use; the Cuts of the Western Jumna Canal were also of the greatest use. The Rangoi Channel I think myself was of very great use, but I am a layman, and the Engineers do not agree with me. It certainly was not so useful as the Ghaggar Canal. Then came roads which are of very little use. The Bir Ditch was a very useful work too.

(*Mr. Higham.*)—You say at the commencement of the famine that tanks were started as test-works. Do you think they were of any value at all as test-works?—Not the slightest. That is to say directly you start one, every one will come out to it.

Whether they are in need of employment or not?—In time of scarcity more people will come out to it.

What do you think is the best form of test-works?—Any public works such as the Ghaggar Canal. If famine does not obtain, then I would turn them on to one of these works.

Apart from the objection that almost everybody comes out to work on village tanks, do you suppose that if you had adhered to tanks you would have been able to offer employment all through the famine on tank work alone?—No. Not this last famine. They would not have held out.

On the east side of the district in the Dabwali direction were there no works at all?—We had the Dabwali-Kalianwali road which we gave up after five miles. It was really a feeder road.

Were the people in a bad way?—Yes.

Did they come out to the Ghaggar Canal?—Yes.

From what distance did they come?—About 30 miles.

All these villagers if they wanted employment had to go to the Ghaggar Canal?—Yes.

Did you start tanks in these villages?—Yes, afterwards when the hot weather came on.

Did these tanks ever get any water into them?—Yes.

Are not they fed or supplied from the Sirhind Canal?—Yes, the Irrigation authorities this year sent down water occasionally.

As regards your system of fixing wages. You fixed what you call the A class male at so many pice, and you gave the A woman a pice less, and the B male a pice less and the B woman a pice less again. Do you recommend that wages be calculated on that system?—Certainly.

If you adopt my classification you will only have practically two classes?—Yes.

Would you make a separate wage then in these classes for men and women, or would you make no difference?—I think I would.

Is it worth while making a distinction in the wage? A man does no more work than a woman, and in the second class called diggers you have no women?—We had a few digger women, very few; so small it is not worth while considering them.

Have you any sentimental reason that a man should get more than a good strong woman?—No sentimental reason at all. That is a question for medical men to answer. Natives do not like the idea of men and women getting the same wage. Where we have had digger women we paid them no more than the men. I do not think there is any sentimental reason why you should make any difference: it is simply a question of physique.

(*President.*)—When you calculate your wage for an A male on a certain wage basis, did that follow very closely the changes in the market rates?—When the market rates changed by 10 per cent., wage was changed.

What was your basis in Hissar? Did it vary much?—Yes, I think it did. Twice or thrice it varied a good deal in the market.

Was one basis fixed by you always?—No, by the officers in charge of works; by me for tanks.

There was no supreme controlling power?—No, not for major works.

Do you suppose that on wages paid according to the ready-reckoner a man was able to purchase very nearly the rations contemplated in the Code?—Yes, certainly. Within 10 per cent.

The tendency was to lower the rate of wage when prices were not going up at all after works started generally?—I would not say that. Yes, on the whole the tendency was for wages to fall.

Therefore 10 per cent. were gained by the worker not by Government, or was it oftener the other way?—Yes, it was gained by him as a rule.

You have given in your note the average daily cost per head at one anna five pie which includes dependants. Both the North-Western Provinces and Bengal rate work out about one anna one pie, and I think the difference is due not at all to a lower grain rate, but to the fact that you classed all your men much higher than they did theirs?—Very probably.

Another reason is that the wage basis was always changing: grain was selling at 8⅓ seers to the rupee and wheat was often at 10. It was against the worker. As a matter of fact they received considerably less than the Code rations. Take the case of the B digger who ought to have got 19 chattaks according to the Code wage, whereas he got only 15. Take the case of the carrier in the North-Western Provinces and Bengal, they put them all into the D class, whereas yours were mainly in B class, or if taken all round, they were paid very much less than yours?—Yes.

You paid them one anna five pie, there they got one anna and one pie?—Yes.

I understood you to say that you did not think they got paid too much?—I don't think they did. I think this question has got to be considered with the outturn of work.

You mean to say that they did harder work?—I don't know whether they did or did not. I don't think the two questions ought to be considered singly. They ought to go together.

I think there is no doubt that you paid two or three pies higher here?—Yes.

I think from what you said to Mr. Holderness just now that you are not prepared to say whether you agree with Colonel Jacob that public works carried out under the ordinary system would have met the requirements of the district?—No, I am not prepared. I don't agree.

Or whether piece-work of any sort would have been suitable?—No, I am not prepared to say that.

Do you think there would have been any objection to abolishing the minimum wage, having no minimum, and leaving it to the officer in charge to go as low as he likes?—There is no objection to that, provided you have kitchens on the works and send people to the kitchens and give them penal rations.

Did a number of people on the works have a great objection to going to kitchens?—Yes.

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(*Dr. Richardson.*)—Some people say that mortality is one of the best gauges of the acuteness of famine in a given tract. Was mortality great in your district of Hissar?—It was not very great.

Would you take mortality as a fair measure of the acuteness of distress?—No, I would rather take the birth-rate as the test of distress.

I see that the birth-rate during 1897 certainly fell in the month of April 20 per cent., but towards the end of the year, in August, it was 38; in September 44; in October 42. I think that is about your average. About 40 was your average birth-rate in Hissar. So that judging even from that do you think the birth-rate a fair test of the intensity of distress in Hissar?—Yes.

At the end of the year, I see in July the death-rate was 40·8; August 46; September 49, and then suddenly in October it jumped up to 92, nearly double what it was in the previous months. Have you any idea of what was the cause of that?—Yes, there was an unusually heavy rainfall in all the arid districts of the Province. This death-rate went up quite as much in districts which never suffered at all from famine, such as Dera Ismail Khan and Mooltan.

Then it arose from causes not directly connected with the famine?—Yes, certainly.

It was chiefly due to fever?—Yes.

In the month of March in your district you had 1,000 deaths from fever; in August the numbers doubled and you had over 2,000; in September you had over 3,000, and then it got over 5,000. Did you notice anything peculiar, or did you hear about there being anything peculiar with regard to this outbreak of fever?—I think it was entirely seasonal. Of course the people were very much reduced by privation, and indirectly the famine was the cause of it.

Do you think it was ordinary pure malarial fever?—It was not contagious in any way.

Did it get worse after October?—I don't remember. I had left the district then.

Do you think from the point of view of economy alone it is expedient to give liberal diet to inmates of poor-houses with the object of accelerating their recovery?—Certainly.

Did liberal diet help to get them out quickly?—Yes.

Did the liberal diet induce any one to go to the poor-house?—We saw that they did not stay very long.

Was there a prevalence of scurvy amongst the inmates of poor-houses? I ask the question because you gave 8 ounces of vegetables. I presume there was no great difficulty in procuring vegetables: you must have had a good supply?—There was no difficulty at all. The local mahajans sent us all sorts of vegetables, and we had the canal in Hissar, Bhiwani, and Sirsa and market gardening went on.

There would not be much fear of scurvy?—Naturally.

You had no orphanages in your district?—No. I was able to get rid of the few orphans that did come.

How did these become orphans? From the death of parents, or how?—Extremely few from death of parents.

Were the medical arrangements sufficient in every way?—Yes.

(*Mr. Bose.*)—What plant was taken as the basis for calculating grain?—Generally *jowar*. It is the grain in this part.

The diet you gave in poor-houses, did that include what was paid from the Charitable Fund as well?—The amount prescribed by the Code was paid for by Government; any extra amount was borne by the Charitable Relief Fund.

(*Mr. Holderness.*)—Did relief works attract labour from non-distressed tracts.—No.

Were there any complaints that they could not get labour for harvest?—No.

Did you ever consider the possibility of drafting labourers to long distances in order to finish up work?—Yes.

Could it have been done?—Yes, if you had done it under conditions we laid down that officers and establishments went with them.

Had you any difficulty in your relations with the Public Works officers?—None whatever: quite the other way.

There was no confusion of functions?—No.

(*President.*)—It was not necessary for you to consult them about changing the rate of wages because they acted according to the Code?—Yes; they acted according to the Code.

When the *rabi* harvest began, did the people readily leave the works to go on harvest work without being pressed in any way?—Yes, because they got a better wage and food in addition.

I understand you began your village relief works before the rain. There was no closing up of big works before the rains under the idea the rains would prevent work being carried on?—No.

(*Mr. Holderness.*)—Did you let famine relief automatically contract itself? You did not put pressure on the people?—Yes, we paid at the end of the famine lower wages than those allowed by the ready-reckoner. We reduced wages by cutting down wages.

When did you stop gratuitous relief?—On the 20th October. Government gave it up on the 15th September. It was carried on by the Charitable Relief Fund after that.

Mr. J. F. CONNOLLY, Deputy Commissioner, Karnal, called in and examined.

Mr. J. F. Connolly.

4th April 1898.

I put in a written statement of evidence.

(*a*).—*Departure from the prescriptions of the Famine Code.*—The following were the chief departures:—

The delegation to Public Works Department officers of the control of matters not strictly professional.

The introduction of the petty contract system on the Nardak Rajbaha in the case of Ranghars, whose women keep *parda*, and who declined to take relief from the Circle Inspectors. The contract system was ultimately extended to *Purbias* or professional diggers who were employed on the works.

No Sunday wages were paid except to those who worked.

The classification of labour prescribed by the Code was disregarded. There was no Class C, and Class A was ultimately abolished.

The payment of wages by the method prescribed in section 174 was given up, as being too expensive.

A modified form of kitchen was introduced on relief works, cooked food being distributed to children.

The gangsmen were not enlisted from relief workers, but were specially entertained.

On the largest relief work, wages were paid daily as payments were made through gangsmen. Daily payments are, I think, best.

Work was allowed on Sundays.

Gratuitous relief in villages was given in money, as in many villages grain stocks were exhausted.

(*b*).—*Degree of success which has attended the measure adopted* (*1*) *with regard to relief of distress and* (*2*) *with regard to economy.*—The relief measures adopted in the district consisted of—

(1) Opening of relief works.

(2) Distribution of gratuitous relief in villages at cost of Government.

(3) Distribution of relief from private subscriptions and contribution from Indian Famine Fund.

(4) Kitchens for children and dependants on relief works.

So far as relief of distress is in question, the measures were highly successful. No case of death from starvation occurred, and there was an entire absence of starving wanderers. Poor-houses were established at three centres, but were utilised by no one. (They were generally styled "*kacha jailkhanas.*")

As to economy—

The test-works which were opened consisted of the digging of tanks, and this is not an economical form of work. It attracts others than famine-stricken people.

The first regular work started was the raising and embanking of a road. Owing to want of experience in dealing with famine labour and a somewhat mistaken idea as to the responsibility of Civil officers in strictly professional matters, a certain amount of money was wasted on this work in the beginning, as a sufficiently high task was not taken from

relief workers. Moreover, the work afforded employment to a certain number of people who could subsist without it. This, however, seems to me more or less inevitable with all relief works. As work approaches a village, the number of relief workers from that village will increase, and as the work gets at a distance from the village, the numbers fall off, and it is not possible to discriminate at the time the really needy from others. As soon as the work was put in charge of a Public Works Department officer matters considerably improved.

The other works—the Nardak Rajbaha and Kaithal Rajbaha—were, I think, constructed as economically as famine relief works can be. The supervision was good, organisation excellent, and full tasks were executed. The actual cost of earthwork was, I think, as low as on any relief work in the Province.

In the distribution of gratuitous relief, no money was wasted. Indeed the Circle Inspectors, in the beginning, had to be told to be more liberal.

Kitchens were relatively more expensive per head than the distribution of gratuitous relief in the form of cash. But they are absolutely cheaper as they keep away children who come on to relief works to get pocket money.

(*c*).—*As regards the distribution of gratuitous relief, I can suggest no improvement on the provisions of the present Code.*

As regards relief works, I think the petty contract system should be introduced at the beginning of distress and towards its close.

The larger the relief works, the better for economy.

(*d*).—I have no remarks to offer.

(*President.*)—When did you take charge of the Karnal district?—In March 1896.

At that time I suppose the district was in ordinary condition?—No; in the Nardak the *kharif* of 1895 was poor and the *rabi barani* crop of 1896 was a failure. The great staple of the tract is gram, and the gram crop failed wholly.

When did you begin to see that it was necessary to give relief?—When the September rains failed.

Did you begin with test-works?—Yes, on the Code system. I started one in the Nardak tract and one in the Naili tract.

Did they draw people immediately?—Yes.

When were test-works begun?—On the 1st of October.

How many relief works had you?—The first work started was on the Karnal-Asandh road which runs right through the Nardak tract. The distress was much more severe here than anywhere else. In the Naili it was not necessary to open relief works in the beginning, but before the Asandh road was completed, I started as a relief work the extension of the Sarsuti Canal, known as the Kaithal Rajbaha; when the Asandh road was finished, we transferred the relief workers on it to the Nardak Rajbaha, and there were then two works going on together—one in the Naili and the other in the Nardak.

Did people come from long distances to these works?—Yes.

How far?—Some of the *kamin* classes came from the Panipat Tahsil, and that was in some cases 60 and 70 miles, and Ranghars came good distances too.

Did the Ranghars bring women and children or come alone?—They came alone.

How about their women and children?—I got permission eventually to introduce the contract system for the Ranghars. They had a certain amount to go upon; in the Naili tract they earned a certain amount by selling milk and by grazing other people's cattle: then we put a certain amount on the charitable relief lists, chiefly the wives and children of the men on the works.

(*Mr. Higham.*)—You had piece-work in your district only towards the end of the operations?—Yes.

Were you satisfied with the results?—Yes. It was only introduced to a limited extent. It was introduced for Ranghars towards the close of the famine, and eventually I put *Purbias* also to piece-work.

How did you introduce it for Ranghars only? Were people not Ranghars put on task-work?—Yes.

Were Ranghars put into separate gangs?—Yes.

If Ranghars were paid by task-work they would only get a subsistence wage and their women nothing?—Quite so. But where necessary their women got gratuitous relief.

To meet such cases you allowed the men enough to keep themselves and their women? Were they able to earn enough to support themselves and a wife each?—Yes. When the contract system was started gratuitous relief to their wives was stopped.

Did you put any limit on the amount a man could earn?—No.

Have you any idea what they did earn?—They earned twice as much as an ordinary worker, and in some cases more.

They brought no women and children?—No.

Of course that will tend to make your wage rates appear very high in the Karnal district? The average per head will be very high in your district?—Yes. The average is higher than in other districts.

You had kitchens on all works?—No. The dependants and children in proportion to workers was very small at the Kaithal Rajbaha. There were no kitchens there. We gave them a cash dole. On the Nardak Rajbaha we distributed them food on the works.

In the case of piece-work I suppose children were not brought to the works?—*Purbias* had their children, but they did not get anything.

Had you piece-work with *Purbias* going on alongside with other classes?—Yes. *Purbias* owing to the contraction of ordinary public works, could not get employment, and came on relief works and at first worked at task-work.

Did their women and children work with them?—Yes.

Did you fix any limit to their earnings?—Not when I put them on piece-work.

Who carried out these works?—The District Board managed the Kaithal Rajbaha. The Irrigation Department the Nardak Rajbaha.

The former was not under the Public Works officers?—An Assistant Sub-Divisional Engineer occasionally visited the work—Mr. Fleming or Mr. Murray, the Sub-Divisional Officer. He visited merely to supervise and did not check measurements, etc.

Did you give Sunday wages?—No, we did not give Sunday wages. If they worked they got them. They did not get them if they did not go to work, not even the task workers.

Did you dig any tanks at all?—Only as test-works.

You say it is not an economical form of work. Why were they opened as test-works?—We did not know at the time: we had no experience of famine works. They are excellent famine works as far as utility goes, but from the point of view of economy they are open to objection. I would have no tanks on the programme if I could have other works.

Why not?—On the ground that they are extravagant. Everybody in the village will work on tanks.

Supposing you were to have a high task on tanks and impose no minimum wage at all. If a man did not do his task he would not get the full wage. Do you think then those objections would hold?—But you might have starving persons unable to do a full task. I still think there would be some crowding; but of course the harder the task the less the tendency to crowd.

Are they a desirable class of relief works?—I prefer them to roads, but they are nothing like the works I have had.

In many districts they cannot find canals?—The Karnal district has plenty for future work.

Had the Kaithal Rajbaha been completed?—No, it is being completed now.

And the Nardak Rajbaha?—It has been a great success; is open now: it irrigated about 12,000 acres in *kharif*, and I think it has done 50,000 this *rabi*. I am not quite sure of the exact figures. But it has irrigated nearly every village to a great extent. In the village of Asandh they had 6,000 bighas under wheat. It was all irrigated.

(*Mr. Holderness.*)—You never had any formidable numbers on your works?—At one time in the months of March and April.

It never went beyond 7,000?—At one time including dependents it was 16,000. The highest point in the district was just before the *rabi* crops were ready for cutting in March.

They went down then immediately?—Yes, and then rose again until the rains came.

Apparently the bulk of your labourers were placed in B?—Yes, we had class A to start with, but eventually gave it up.

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(*Mr. Higham.*)—Very few really found their way into D?—Very few.

You say that "the payment of wages by the method prescribed in section 174 was given up as being too expensive." That is the payment of wages on the grain equivalent system?—Yes.

How did you fix the wages?—By calculating the cost of the individual items of the ration.

It is complicated?—Peculiar to a certain extent. It entailed a certain amount of trouble, and the item "vegetables" is vague.

That being so, how did you calculate the cost of the vegetable item?—I think we took vegetables at 10 seers to the rupee.

What was the difference between the wages thus calculated and the grain equivalent system?—At least 12½ per cent., in some cases 25 per cent.

In calculating in that way did you leave any margin either for waste or for grinding?—It was not necessary as no famine labourer bought all the items of the ration: what he did was to buy wheat flour or gram flour, and a little *gur*.

I understand that the way in which you arrived at your wages was this. In the case of men you took the A ration and calculated the cost of the various items, flour being then 9½ seers to the rupee, pulse 8 seers, maize 11 seers and ghi 1⅓ seers and vegetables 10. You found that the cost of the A ration thus calculated amounted to 22·78 pies and you then assumed that the B wage was 15 per cent. less than the A wage, so that the B wage was 19·36 pies for a man and 15·33 pies for a woman, and that was considerably lower than what the wage would have been on the grain equivalent scale?—That is so. Under the grain equivalent scale with grain at 9½ seers to the rupee the B wage for a man was 2 annas and for a woman 1 anna 9 pies.

Did you think otherwise that the B wage if given according to the grain equivalent was excessive for the requirements of the people?—I think the other wage was sufficient. It would have been excessive had we given it under the grain equivalent system. It was enough to keep them alive.

Do you think they saved at all?—No.

You think it was just enough then?—Yes.

Did it contain any allowance for wood?—This was not necessary. Jungle grew everywhere in abundance.

Had they jungle products to supplement their food by?—Yes, the *pilu* and the *kair*. A lot of people live on these.

Was there much fining for short work?—No, very little. Those who worked earned as a rule their full wages.

No Sunday wage was paid except to those who worked. I suppose this means that work was allowed on Sunday?—Yes, on all works.

On piece-work as well?—Piece-work was allowed on Sundays.

Why did you not pay the Sunday wage except on condition of working?—I think it was in consequence of a Resolution of the North-Western Provinces Government, where it was held by Sir Antony MacDonnell that it was demoralizing to pay them if they did not work. I saw no objection to it.

The establishment did not object?—Of course it threw a certain amount of extra work on them.

Kitchens you introduced at a late stage?—Yes.

And before you introduced kitchens your dependants ran up very largely?—Yes.

What is your opinion about kitchens? Would you have them always?—Yes, certainly in the case of non-working children.

Did you see any signs of people neglecting their children?—No; they were well looked after.

Kitchens were only introduced as an economical measure?—Yes.

Gratuitous relief: was that on a large scale in the villages?—Not on a large scale. I think the highest number relieved was 2,000.

Was that all over the district or merely in the distressed area?—In the distressed area. The total population of it is 2 lakhs.

Who were the people who were put on gratuitous relief?—They were people who depended in ordinary years on village charity; people quite incapable of working.

Did you adhere to the strict clauses laid down in the Code?—Absolutely.

Did you find it sufficient?—I did find some very hard cases the Code did not cover, but I was able to relieve them from Charitable Relief Funds.

Were there any cases of Lambardars who objected on account of their *izzat* to taking anything at all?—Yes, they objected if there was any enquiry about it. The Tahsildar had to give it quietly. Sayyads and others also had to get relief in that way.

(*President.*)—I think you said that you gave the wives and children of Ranghar workers charitable relief?—Yes.

The Ranghars apparently on works were merely earning very low contract rates?—Yes.

Did people from non-distressed villages go to your relief works?—A certain number of *kamin* classes did.

Did they stay on the works during harvesting?—Immediately the harvest came on they went and did not come back again.

I suppose in those villages where they had harvests circumstances got easier?—Yes. In many such villages the Lambardars came to me and asked me to stop gratuitous relief, the villagers being willing to again take their poor on their hands. Of course, I agreed. In one case the people had not allowed the Relief Officer into the village. They looked upon it with shame that their *kamins* should receive gratuitous relief.

How long did your relief last?—The works ran into July. The moment the rains came all the people cleared off except the *Purbias*, and they would have gone too, but for the stoppage of ordinary works. Gratuitous relief stopped at the end of August.

Did you continue relief from the charitable fund to any extent?—To a small extent.

Side by side with this gratuitous Government relief had you gratuitous relief from the Charitable Relief Fund for *purda nashins*?—We started gratuitous relief at the expense of Government in February, and at the expense of the Charitable Relief Association Funds later. The two ran together. The charitable relief ran a little longer.

Had you poor-houses?—I opened two, but no one came to them.

No starving wanderers of any description at any time?—No.

In this distressed tract with two lakhs of people was the failure complete?—Failure was complete in the *rabi* and *kharif* of 1896, and the *rabi* of 1897 of *chari*.

Many villages in that condition?—Any number of them. In the *rabi* of 1897 there were no crops. The preceding agricultural year the *kharif* had been bad. In 1895 the *rabi* had been a bumper one. The *kharif* of 1896 was a total failure. There were absolutely no September rains.

Then in spite of this tremendous failure you only had 2·5 percentage of your population on relief works?—About that.

That is very small?—I think I can account for it. The centre of the Nardak is now traversed by the Western Jumna Canal and is irrigated and in a highly prosperous state. It is peopled by Ranghars connected by marriage and caste ties with Ranghars in the unirrigated Nardak tract, and they received thousands into their houses and gave them food and shelter until the rains broke.

Do you think the Ranghars of the Nardak tract have resources of their own also?—I think so. Otherwise far more would have come on relief works.

Was there a considerable loss of cattle?—Not to the same extent as in Hissar, but large numbers perished.

In some villages there was not drinking water?—This was the case.

Was there much sale of silver ornaments and brass vessels? Had a lot of people on the works their ornaments with them?—There was not much sale of them, many had their ornaments with them.

Much mortgage or alienation of land?—Alienation was most where distress was least. In the Panipat Tahsil more than anywhere else.

Apparently the zamindars managed to get through the famine with very little relief and without mortgaging their lands?—Yes.

What is the present state of the district, especially the distressed tract?—The distressed tract had a bumper *kharif*, the best crop for 20 years. The irrigated *rabi* promises to be splendid, but the gram I am afraid is all gone. Wheat promises to be very good. No distress now.

As to the utility of the famine relief works?—I don't think they could be more useful. They will prevent famine ever occurring again.

I suppose your mortality was low?—The year was one of exceptional health.

(*Dr. Richardson.*)—Was the whole of your district affected?—No.

I ask because looking at the return on page 17 of the report the area as shown in column 2 is 2,440 square miles and the affected area in column 4 is given as 2,153 square miles?—This is wrong.

As far as I understood you to say just now the whole relief was stopped about August?—Yes.

Then judging from the mortality your district did not suffer as a result of the famine directly?—No.

After you had broken up your works I see the mortality in the month of September rose to 44 per thousand and then in October it rose to about double, 87 per thousand?—They had an exceptionally heavy rainfall in September. It was usual autumnal fever. The figures were not higher than those of any ordinary year.

The number of deaths rose from 857 in the month of July to 3,663 in October?—That was simply seasonal fever. Probably, as we heard was the case in Hissar, the people had rather run down from hard times.

Were there any deaths from starvation in your district?—Not one.

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Any suspicions?—I saw one case which I thought was death from starvation, but the *post-mortem* showed that the man had died from pneumonia. He was a regular skeleton, and nothing was found in his stomach.

Had you any poor-houses?—We had, but they were not utilized: we had no need for them.

(*President.*)—I see you reduced your wage below the scale which the grain equivalent would have given, yet in the table given in paragraph 62 of the report I see your district heads the list in respect to average wage per relief worker?—I should say that was due to the introduction of the petty contract system in the case of Ranghars.

(*Mr. Fenton.*)—The area of distress in your district is shown at 2,400 square miles. Is that too large an area to show as distressed? Your map may be wrong?—I apprehend the mistake may have arisen in consequence of my drawing. Sir Dennis Fitzpatrick practically directed us to consider the whole area as distressed at one time and the mistake may have arisen from that.

Then the colouring in the map shows too large an area as distressed?—Yes.

Did you in working the ready-reckoner give by flour or grain?—By flour; and in replying to Mr. Higham's "Famine Notes" I expressed my opinion that it should be by flour.

(*Mr. Holderness.*)—What difference does it make, much?—No; about one-tenth extra.

Mr. C. E. V. GOUMENT, Executive Engineer, Delhi Provincial Division, called in and examined.

I put in a written statement of evidence.

Mr. C. E. V. Goument.

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I.—Relief Works.

(1). The class of works most suitable for Famine Relief, in my opinion, are large works of public utility and particularly those which are likely to be productive, such as canals and railways.

Class of works most suitable.

(2). Feeder roads to railways and district roads are also suitable works, but they should be undertaken with caution. Raising and improving unmetalled roads generally offers useful work for famine relief labour though of temporary utility, but new metalled roads should not be constructed without very sufficient reasons, as their subsequent maintenance becomes a serious drain on the resources of local bodies, and if they are allowed to fall into disrepair, they are far worse than unmetalled roads.

Roads. Questions 53, 54.

(3). I consider metal collection, if absolutely needed, a very suitable means of employing relief labour. If carried out systematically, it can be done more economically as a famine work than under ordinary conditions. It was tried to a small extent in this Division, but it was introduced towards the end of the famine and very little work was done. It was not popular, as labourers preferred to go to tanks which were in progress in the vicinity. The numbers attending the work were so low that it had to be stopped soon after it was begun. It can hardly be said, therefore, that it had a trial in this Division.

Metal collection. Question 55.

(4). The number of day units of labour that can be employed per mile of each class of metalled and unmetalled road is as follows, the duration of the famine being taken as 9 months of 230 working days (excluding Sundays and holidays):—

Number of day units that can be employed per mile of road. Question 52.

	Per mile.
(*a*) 1st Class metalled (12 feet metal and 30 feet formation width).	100
(*b*) 2nd Class metalled (9 feet metal and 24 feet formation)	80
(*c*) Unmetalled (formation width 20 feet)	25

(*a*) and (*b*) include the collection and consolidation of metal and collection of a reserve supply for five years' renewals.

(5). The lengths of new roads proposed for construction in the districts of the Division in the event of another famine are as follows:—

Delhi District.	Metalled roads	*Nil.*
	Unmetalled roads	184
Gurgaon District.	Metalled roads	*Nil.*
	Unmetalled roads	336
Rohtak District.	Metalled roads	*Nil.*
	Unmetalled roads	268
Hissar District.	Metalled roads	*Nil.*
	Unmetalled roads	272

(6). Deepening village tanks is a very favourite form of relief work. It has its advantage no doubt, being simple and convenient and to a certain extent useful and effective, but it should, in my opinion, be resorted to only when other means of employing relief labour fail. The removal of silt from these tanks is merely a temporary convenience for certain villages and of no permanent utility to to the general public. It is a work which, if not done for them, would most probably be undertaken by the villagers themselves in slack months of the year when not engaged in cultivating their fields.

Village tanks. Question 57.

If tank work *must* be undertaken on a large scale by the Civil Department an Assistant Engineer or experienced Upper Subordinate should be attached to each district to supervise the work generally. He should fix tasks, organise gangs, and drill Civil subordinates into the proper method of working.

Supervision of tank work by Public Works Officers.

II.—As to large and small works and the distance test.

(7). It should not be difficult to organise a workable system of drafting labourers by rail or road to large works. Labour is commonly imported for large public works and there is no reason why it should not be done for famine works also. Conveyance by rail is comparatively a simple matter, and for distances of 100 miles or so should not be so expensive as to make it prohibitive. A large work should easily stand the charge.

Drafting labourers to distant works. Question 73.

Drafting by road would require a more elaborate system, but it need not necessarily be complex or entail heavy expense if relief seekers are allowed to shift for themselves as far as possible, and are merely helped with small money advances or food at various points on the route, on their producing scrips supplied to them by a responsible Civil official at their starting point.

(8). Residence on works has been rather the exception than the rule in this Division during the late famine, owing no doubt to the numerous petty works scattered over the districts and the distress not being very severe. I should not make residence on works obligatory. It is an advantage in some respects to have labourers going home to their villages. It reduces the expenditure on hutting and other contingencies and minimises the risk of epidemics (if not already prevalent in the neighbourhood). I would, however, make no reductions for "distance" in the tasks of persons not living on the works. No reduction was ever allowed on this account in the Delhi Division as far as I am aware.

Residence on works. Questions 74, 75, 76.

(9). I have not noticed any reluctance on the part of villagers to live on the works, but it was never enforced on any of the works in my charge.

Reluctance of villagers to live on works. Question 77.

NOTE.—The questions referred to are those drawn up by the Commission for the guidance of witnesses.

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(10). If famine were widespread, I do not think the disposable establishment would be large enough to supervise works, so numerous and so arranged as to allow the majority of the workers to return daily to their homes, unless village tanks were taken in hand everywhere whether required or not.

Establishment necessary to supervise petty scattered works. Question 78.

III.—Task-work and piece-work.

(11). All the works in this Division were carried out on the task-work system with two unimportant exceptions which are hardly worth mentioning.

Question 84.

(12). The main objection to contract or piece-work for famine relief lies in the unequal distribution of relief funds. In piece-work there is no doubt that a strong or expert worker would receive an unfair share of relief money, while there is no guarantee that a comparatively infirm labourer, with a large family, consisting, perhaps, of several small children, might not be reduced to starvation in spite of his best efforts to earn a subsistence allowance. During a severe famine, or when a severe famine is impending, it is the duty of Government to husband its resources as far as possible with a view to afford relief to the maximum number who may need it. When, therefore, severe distress exists or is even anticipated, it would not, in my opinion, be wise to resort to contract or piece-work. If, however, the distress is local or slight and is not likely to assume serious proportions or to last long, piece-work would be eminently suitable.

Piece-work as an alternative to task-work. Questions 85, 86, 87, 88.

(13). Imposing a limit on the amount to be earned by an expert labourer on piece-work would be troublesome in practice, and would not always be effective in preventing him from earning more than his fair share. A labourer might, for instance, work on two different works if they happened to be within a few miles of one another, or he might engage in private work in addition to the relief work and so earn more than a sufficiency. Then, again, the objection to piece-work would still remain that infirm labourers and those burdened with young families would be exposed to the risk of starvation.

Limiting the amount to be earned by an expert labourer. Question 89.

(14). I am not in favour of allowing famine labourers to earn something in addition to the normal wage for the performance of a task in excess of the normal for reasons similar to those which I have urged against the adoption of piece-work when distress is severe.

Question 102.

(15). It is not necessary in my opinion to enter at length into the question of tasks in a Famine Code. It might well be left to the decision of the Divisional Engineer in charge of the famine-stricken districts. Working conditions vary in every district, and the local Public Works officer is the best judge of the task which should be imposed in any particular locality. He has his Divisional schedule of rates to guide him, in which are tabulated the rates to be given for different descriptions of work in the several districts of his Division. In the case of earthwork, for instance, he has a rate per thousand cubic feet for soft earth, medium soil, hard clay, as also the increase of rate for additional lead and lift. Why should he not be allowed to apply these rates, *mutatis mutandis*, to famine works? My experience of the past famine leads me to think, that it is a mistake to tie the hands of officers by hard-and-fast rules and interfere unduly with workmen in the matter of tasks and organisation of gangs. For instance, I feel sure better results would have been obtained if the "outturn per digger" had not been so closely watched as it was.

Tasks and organisation of gangs. Question 107.

To secure full tasks or a good "outturn per digger," officers in charge are naturally inclined to select able-bodied men for diggers. A second class worker, though quite equal to digging and really a surplus hand among the carriers, is not employed as a digger because his outturn would be inferior and he would spoil the record.

This suits second class workers admirably, as most of them prefer low wages and the lighter task of carrying to higher wages with the labour of digging. The result is of course a good "outturn per digger," but a high rate for the work done. Workers should not I think be classified as "diggers and carriers," but according to their capacities for works as far as this can be judged by the officer in charge. A first or A class worker should, for instance, be made to carry, if not required as a digger, and a second or B Class worker made to dig, to the best of his ability, if not required among the carriers.

(16). As to the question of introducing standard task for all carriers, as suggested in paragraph 10 and Appendix I of Mr. Higham's Report, the formulæ calculated by Mr. Higham cannot be improved on. I venture to think, however, that it is as unnecessary to prescribe tasks for carriers in a Famine Code as it is to fix that of diggers, and for similar reasons. It should be noted that the difficulty lies not so much in calculating the correct number of diggers or of carriers required to perform a certain work, but in fixing *the economical proportion* of diggers to carriers in a body of workers who must be taken as they come and cannot be selected for the particular work to be done.

Standard task for carriers and diggers. Questions 104, 105, 106.

The conditions being variable, the problem cannot be determined by means of formulæ and can only be solved by actual trials. If economical results are desired, it had better be left to the expert officer on the spot to be decided in each case as circumstances require. The working rates will always show whether the officer in charge is doing the best he can with the material at his disposal or not.

(17). Maximum tasks for diggers and carriers and stone-breakers might be tabulated in an appendix to the Famine Code. The Public Works officer in charge should be given a free hand in the matter of actual tasks and organization of gangs, but he should be held responsible for the condition of the workers and for the working rates, and it should be his duty to see that the maximum tasks laid down in the Code are not exceeded without the previous sanction of the Local Government.

(18). The task should, I consider, be set for a sub-gang or party consisting of 3 or 4 diggers and the necessary complement of carriers. Tasking individuals is a mistake and leads to unnecessary complications in measurements and accounts.

Tasks to be set for parties and not for individuals. Questions 90, 108.

(19). Fines or short tasks should be realised by deduction of a certain number of pice from each worker of the sub-gang all round, unless it is obvious that the short task is due to the contumacy or laziness of any particular individual in the gang, in which case the delinquent only should be fined heavily. The maximum fine leviable should be fixed by the Code. The maximum might be put at one-third wage to the nearest pice.

Fines. Question 99.

(20). The classification of relief workers prescribed in the Famine Code is much too elaborate and confusing. The following is proposed as being simple and sufficient for all practical purposes. All workers should be divided into three classes which might be called Class A, Class B and Children :—

Classification of relief workers. Questions 94,96A, 97,98.

Class A to consist of able-bodied or expert labourers, male or female, such as full task diggers in earthwork or quarry men and hammer men in stone breaking.

Class B to consist of al lordinary workers, male or female, such as carriers and weak diggers in earthwork or breakers and stackers in metalling work. This class would include all working children above 12, male or female.

Children. Working children between 7 and 12.

Children below 7 should receive gratuitous relief as noted further on. I would not classify mates, water kahars, conservancy chaukidars, etc., with relief workers. These should be paid a salary by the week or month on a separate acquittance roll and be charged to a distinct sub-head, *viz.*, "Petty establishment." Their salaries would be regulated to a certain extent by the ruling prices, but would not vary with slight fluctuations and might safely be left to the discretion of the officer in charge.

(21.) The relief of dependants and small children should, as a rule, be in the hands of the Civil Department and, when necessary, should be given in villages by means of kitchens. Dependants should be discouraged from coming to works as far as possible, but when their presence is unavoidable, they should be kept distinct from workers and allowed a fixed money dole on a separate muster roll. The amount so disbursed should be adjusted periodically by transfer with the Civil Department. This would simplify works accounts considerably, and enable the officer in charge to see clearly from day to day how the progress of work compares with his actual expenditure on wages proper. If dependants *must* be relieved

Relief of dependants and small children.

n works, it will be sufficient to divide them into two classes, adults and children," and pay them as follows :—

If the price of grain is over 10 seers per rupee—

Adults . . .	3 pice each.
Children . . .	1 pice „

If grain is 10 seers or under—

Adults . . .	4 pice each.
Children . . .	2 pice „

(22). The wages of workers should be calculated as follows :—

Wages of workers. Question 95.

Class A . . .	x pice.
Class B . . .	x—2 pice.
Children under 12 . .	x—4 pice.
Where x= . . .	P+3 pice—

P being the price of 11 chattaks of the staple grain to the nearest pice, and 3 pice the fixed allowance for condiments, vegetables, firewood, lamp oil, clothing, etc.

The following table shows how the wages calculated as above would work out approximately for prices between 6 and 15 seers per rupee. The rates will be found to compare favourably with those given in the ready-reckoner of Appendix D of the Punjab Famine Code :—

	6 seers per rupee.	7 seers.	8 seers.	9 seers.	10 seers, 11 seers, or 12 seers.	13 seers, 14 seers, or 15 seers.
	Pice.	Pice.	Pice.	Pice.	Pice.	Pice.
Class A* .	10	9	9	8	7	6
Class B .	8	7	7	6	5	4
Children .	6	5	5	4	3	3 minimum.

* Compare Class A of this table with Class B of the ready-reckoner and Class B with Class D.

(23). As regards the grain equivalent of the minor items in the famine ration, I am of the opinion that the equivalent of these extras should not vary as their price does not appear to fluctuate with the price of grain. The fixed amount allowed by me in the preceding paragraph for class A, *viz.* 3 pice, is 75 per cent. of the value of the grain ration fixed by the Punjab Famine Code for class B labourers (11 chattaks) when the price of grain is 10 seers to the rupee.

Grain equivalent of the minor items of the famine ration.

(24). Wages should be paid twice a week, and payment should be made, when workers are off duty, in the middle of the day or at the end of a day's work. A sufficient staff of cashiers should be employed to pay off the workers quickly and with as little disturbance to the work as possible. A cashier should be able to pay 400 workers per hour, and at this rate he should be equal to paying 1,200 workers, if each worker receives payment every third day and he makes payments for one hour only every day.

Payments.

The system of payments described by Mr. Higham in paragraph 10 of his notes on Inspection of Famine Relief Works in the North-Western Provinces seems simple and effective. I doubt, however, if Punjabi mates are sufficiently intelligent to be able to pay 50 or 60 men of a gang without making frequent mistakes and causing serious confusion.

(25). As famine workers are supposed to receive only a subsistence wage, payment for Sundays can hardly be denied them. Class A and class B should receive the wages of class B for Sunday, and working children and dependants the same as usual. Work on Sundays should not be allowed. I would only give Sunday wages to regular attendants and not to occasional workers; the latter are presumably well off if they do not attend regularly.

Sunday labour and payment for Sundays. Question 103.

(26). The ratio of adult male workers to women and children has varied from 1 : 1½ to 1 : 2 in the Hissar district. It has been 1 to 2½ in the Rohtak district and 1 to 1¾ in the Delhi district. There has been no great variation in these ratios from time to time.

Ratio of adult male workers to women and children. Question 112.

IV.—Relations of Civil and Public Works officers in connection with the management of relief works.

(27). When it becomes evident that large relief works will be required, the Public Works Department should be entrusted entirely with their organization and management. A large famine work is after all not dissimilar to ordinary Public Works as regards organization and management of such details as food and water-supply, sanitation, hutting, hospitals, etc., and if Engineers are capable of managing ordinary works unaided, there seems to be no reason why they should need to be controlled by Civil officers in managing relief works. As a rule Civil officers would, I think, much prefer to be relieved entirely of the management of such works, as their other duties in time of famine are very burdensome, while Public Works officers would work with greater zeal and freedom if unhampered by interference from another Department. I consider therefore that the division of duties and responsibilities of Civil and Public Works officers should be clearly marked. The Public Works Department should be entirely responsible for all management of large relief works. The Civil Department should undertake all famine administration not connected with these works, such as village relief, distribution of charitable funds, petty relief works in outlying parts of the district for which no Public Works officer is available, etc.

Duties of Civil and Public Works officers. Questions 114, 115, 116, 117.

The Civil officer would draft relief seekers to the works, and the Public Works officers would arrange for their reception and find suitable employment for them.

(28). This sharp division of duties should in no way prevent the co-operation of the officers of both Departments in matters in which such co-operation is necessary. It will be the duty of the Public Works officer, for instance, to keep the Civil officer informed of the attendance on his works, the number of workers he can provide for, the health and condition of the workers. He would also, if required, afford the Civil officer all the assistance in his power in connection with the petty relief works in charge of the Civil Department. The Civil officer, on the other hand, would give the Divisional Engineer full and timely information as to the number of relief seekers he expects to draft to his works, the probability of distress deepening or otherwise, the outbreak of cholera or other epidemic in his district, and other matters of this nature. He would also help the Public Works officer, if necessary, in arranging for supplies and in procuring carriage for transport of tools, etc.

Co-operation of Civil and Public Works Officers.

(29). Assuming that the services of all available Public Works officers and subordinates have been fully absorbed, the officials most suitable to hold charge of relief camps are Royal Engineer officers and subordinates of the Military Works Department, and, failing these, for smaller works, Civil officials of the rank of Tahsildars and Naib-Tahsildars. Officers in charge should always be placed under the direct orders of Public Works officers, in the case of works carried out by the agency of the Public Works Department.

Officers most suitable for holding charge of relief camps when Public Works officers are not available. Questions 118, 119, 120.

(30). I think it would be desirable to invest Assistant Engineers in charge of large relief works, or doing the duties of Inspecting Officers, with second class Magisterial powers to give them greater influence in managing camps and maintaining order.

Assistant Engineers should be vested with Magisterial powers. Question 121.

Supplementary note.

The fixed allowance referred to by me in paragraphs 22 and 23, *viz.* 3 pice, refers only to the particular class for which it has been calculated, *i.e.*, class A of my classification. The fixed allowance for class B of my table would be two pice, which is about 75 per cent. of the value of the grain ration fixed by the Punjab Famine Code for class D labourers (8 chattaks), when the price is 10 seers to the rupee. The fixed allowance for children, similarly calculated on a grain ration of 5½ chattaks, would be 1½ pice.

The wages given in my table work out approximately to the following, slight differences being neglected to preserve the uniform simplicity of the rule given in paragraph 22 by which the wages of class B and children are deduced from the wages of class A.

Class A .	Price of 11 chks. + 3 pice.
Class B .	„ 8 chks. + 2 pice.
Children .	„ 5½ chks. + 1½ pice.

Mr. C. E. V. Goument.

4th April 1898.

By comparing my table with the ready-reckoner as explained in paragraph 22, it will be seen that the rates agree very nearly for prices between 7 and 15 seers per rupee. For 6 seers and under, my rates are lower because I fix the allowances for extras.

(*President.*)—You were put on special duty on famine relief?—I was in charge of the Delhi Division as Executive Engineer and supervised the famine relief works of the Division from April 1897 to the end of the famine.

The Delhi Division or what part?—The Delhi Provincial Public Works Division, which includes Delhi, Gurgaon, Rohtak and Hissar districts.

(*Mr. Higham.*)—You had charge of relief works under the General Branch?—Yes.

What was the maximum number employed on relief works in the General Branch?—About 13,000.

The bulk of the works were village tanks?—They were managed by the Civil Department. The principal works in my charge were in the Delhi district the Delhi-Agra Railway, in the Hissar district the Bir Ditch and the Rangoi Channel.

Were the others under the Irrigation Department?—Yes.

Had you any Sub-divisional Officer in charge of your works?—I had Major Lutyens in charge of the Delhi-Agra Railway and Lieutenant Mainprise at Hissar in charge of the Rangoi Channel and the Bir Ditch.

All Royal Engineers?—We expected the railway work to be a very large one, but it did not come to anything. We expected about 10 or 12,000.

Did you consider it necessary to have an Engineer officer in charge of each relief work?—No, I don't think it was necessary, but of course we expected the Delhi-Agra Railway would be a very much larger work than it turned out to be.

It was only in progress three months?—We stopped when the rains set in and we found the numbers were not increasing.

You had no metal collections?—We tried a little in the Rohtak district.

(*President.*)—What is your metal?—Principally kankar, very little stone.

You had nothing to do with tank work?—No, that was carried out by the Civil Department.

(*Mr. Higham.*)—You consider (paragraph 12 of your note) that piece-work is not suitable for relief labour?—No, not if famine is severe or expected to be severe.

Do you think it would be suitable in the degree of famine you had to deal with?—Yes, I think so.

Your objection to it being that feeble workers cannot earn a subsistence allowance?—Yes, that is my objection—my only objection.

Otherwise of course piece-work is better than task-work?—More economical.

Do you think it would be possible to discriminate between feeble workers, who are quite unable to earn a subsistence allowance, and those who might be put upon piece-work?—I think that would be quite practicable if you had two works going on side by side.

Are you in favour of doing away with the minimum wage?—No, I am not.

You would pay the minimum wage to all classes of workers?—The minimum wage would be a penal wage for short duty; in fact it would mean fining. I should not abolish fines, but I should put a limit on fining. I should limit it to one-third wages.

If you paid a one-third wage, that would not be a subsistence allowance?—No, I would limit the fine to one-third and pay two-thirds.

In paragraph 15 you say that really too much importance has been attached to the outturn of the digger. It has been too closely watched. The Code does not prescribe that it should be?—No, but it lays down the task for diggers in section 119. The task for Class B will be from 10 to 15 per cent., and that for Class C about 25 per cent., below that for Class A.

If there is a digger who cannot turn out 25 per cent. less than that for Class A, he is put into Class D?—Yes. He is not employed as a digger at all, but classed as a carrier.

So if a digger is not fit to be in Class C, he goes into Class D?—Yes, as a carrier.

You mean to say that 25 per cent. below Class A is not enough?—No. I should go down to half.

In paragraph 21 you suggest that relief to dependants and children should, as a rule, be in the hands of the Civil Department and should be given when necessary by means of kitchens. Do you mean to say that you would have an Engineer or Major of Royal Engineers do superintend a relief work and then you would call in the Civil Department to run kitchens?—I say dependants should not be encouraged to come to works at all.

Do you think on other grounds it would be good?—Yes, I see no objection to it.

You would have them brought on gratuitous relief lists?—Yes.

Quite disconnected with the work?—Yes, as far as possible.

Do you think people came from a distance to the works?—Sometimes from 20 miles.

If you have large works and you enforce residence on works you have to take dependants, but you have a separate camp for them. If you have a separate camp they ought to be in charge of the officer in charge of the work?—Not necessarily. I admit you must sometimes take dependants. It would be unavoidable sometimes. But gratuitous relief should be charged to the Civil Department. Gratuitous relief should not form part of the charge on the Public Works Department. My object is to keep the accounts distinct.

Surely payments for gratuitous relief are kept separate from the wages of workers?—No, they are not. As a rule they are entered on the same muster rolls as the wages of workers and pass through the same accounts.

In paragraph 22 you say that the price of condiments, etc., should be regarded as fixed at 3 pice, that it does not fluctuate with the price of grain. Is that the case?—Yes, we found it to be so in the Punjab. It does not vary at the same rate anyhow. The fluctuation is very slight; scarcely worth considering.

In your formula calculating the rate, you allow 3 pice for the cost of condiments?—Yes.

That is a fixed allowance?—Yes.

In your table of wages (let us take Class B "adult carriers") under the 10-seer basis you would give them 5 pice, of which 3 is on account of condiments?—Three pice is the fixed allowance for Class A. It would, of course, be proportionately less for the other classes.

About 40 per cent. of your workers were males, were they not?—They varied in different districts. In Hissar they were about 38 per cent.

In such proportion as that should there be any difficulty in keeping your carriers fully employed?—Yes, we had difficulty, for the simple reason that Class D men were not considered good enough to be employed as diggers. I made them dig and the result was that the rate dropped to about half. I also had a large number of women digging on one of my works.

(*President.*)—On what work was that?—The Hissar Bir Ditch. We had only one carrier to one digger, and we got that by employing women as diggers.

(*Mr. Holderness.*)—How far do you think it reasonable to expect people to come daily to a work?—About five miles is the maximum.

Did they come?—Yes, on the Delhi-Agra Railway.

Don't you approve of residence on works?—I don't say I don't approve of residence on works, but if workers would rather go home I should not enforce residence.

Did they reside generally or not?—No, they did not.

To what extent were you able to have accurate measurements on the works and by whom were they made? Were you able to measure up regularly?—Yes, and the work was checked by officers in charge.

Did you fine below the minimum?—We did not do very much fining because we did task-work by parties.

What was the ordinary size of the parties?—Four diggers and 5, 6 or 7 carriers.

Did they generally do the task?—Yes.

In other Provinces it has been found that people preferred not to do the full task, but to do little and get the minimum wage?—That applies to individuals, as a rule, and not to parties.

You did not find in your system that tendency?—No, I had complaints occasionally, but not many.

You apparently would reduce the present minimum wage by, say, one-third?—I simply gave that fraction to make it simpler for calculation.

What is your opinion about the sufficiencies of wages paid under the Code to workers? Is it sufficient for their subsistence?—About right.

Would every digger be in A?—Not necessarily. I would go by physical strength and actual capacity for work.

Your classification would have the effect of reducing the average wage of the worker?—It would not as a matter of fact. I have not altogether abolished special or Class A workers, but put them on a separate muster-roll, and you will find the average wage of my Class A and Class B agrees very closely with that of Class B and Class D of the Code.

You did not want to reduce the wages?—Not at all.

You did not therefore think they were unduly attractive during the late famine?—I think they were just right.

Were there any instances in which relief works drew people from ordinary works?—I had a few complaints, but I don't think there was much in them.

(*Mr. Fenton.*)—You say the Public Works Department should be entirely responsible for large relief works. What do you mean by large relief works?—I mean such works as canals and railways and important roads.

You don't mean relief works as defined in section 25 of the Code?—I didn't refer to that.

Could you propose an improved definition of large works with reference to your proposal above?—The definition given in section 25 is as good as any I could give and might stand.

That is "works calculated to provide simultaneous employment for three months to at least 1,000 persons."?—Yes, I think so.

Do you think a Public Works officer should be put in charge of a work employing only 1,000?—Yes, a subordinate. *Mr. C. E. V. Goument.* *4th April 1898.*

Was a mistake made in the case of the Delhi-Agra Railway in employing Major Lutyens?—As it happened it was a mistake, but we did not think we should have only 1,500 on the Delhi-Agra Railway. We expected 8 to 10,000.

That is to say the largeness of the work does not depend on the number of persons actually employed?—Not by the day.

It depends on the number of persons it is calculated to employ?—Yes.

Would you lay down any limit as the minimum number of persons to be employed on work of which the Public Works Department takes charge?—No, I don't think it is necessary to distinguish it in that way. In doubtful cases I should leave it to the Commissioner of the Division to decide as to whether a work is large or important enough to justify its being made over to the Public Works Department.

Would you define any limit as to the number of persons beyond which the Civil Department management should not continue?—No, I don't think I would define a limit. I don't think it necessary to do so. If a work grows to such an extent that the Civil Department thinks it might be classed as a large work and handed over to the Public Works Department, it should be handed over.

Then you maintain that where the Public Works Department management should commence in the first instance depends on what work it is calculated to do?—Yes, I don't think we have anything else to go on. For instance, we were quite justified in considering the Delhi-Agra Railway a large work.

MR. C. J. FLOYD, C.E., Officer in Charge, Ghaggar Canals, called in and examined.

I put in a written statement of evidence. *Mr. C. J. Floyd.* *4th April 1898.*

Departures from the prescriptions of the Punjab Famine Code which have occurred in the Province during the recent famine.

1. The works in my charge were the Ghaggar Canals. These are situated partly in the Sirsa Tahsil of the Hissar district and partly in the Hanumangarh Tahsil of the Bikanir State. When the canal works proper were drawing to a close it was found convenient to put some additional relief work in my charge consisting of tanks in villages commanded by the Ghaggar Canals, and roads along the canals and river embankments. The latter works were all in Tahsil Sirsa, District Hissar. I put up a skeleton * plan, scale 1 inch to a mile, showing the extent of my charge, which is an Independent Executive charge formed for the construction of the Ghaggar Canals. From December 1896 to July 1897 I had four Engineer officers holding Sub-divisions under me who were considered as officers in charge of relief work for purposes of sections 122, 148 and 149 of the Punjab Famine Code. After July only two Sub-divisions were necessary.

* Not printed.

2. A few particulars and statistics will be found in the subjoined table marked No. 1.

3. The measures of State Relief I used in Tahsil Sirsa were—

Under section 126—Charitable relief to new comers.

Under sections 127, 128, 129 and 174—All applicants classified. Tasks allotted to relief workers and wages paid as laid down in the Code.

Under section 131—Sunday wage.

Under section 138—Minimum wages paid as fines for short work.

Under sections 140A and 141—Gratuitous relief to non-working children and dependants.

Under section 194—Kitchens provided later on.

Under section 142—Huts and other temporary shelter provided for relief workers.

Under section 143—Hospital accommodation for and charitable relief to sick persons.

Under section 145—Traders encouraged to open shops at the works.

There were also other forms of charitable relief.

4. In Bikanir territory similar measures of relief were used, with the exception of kitchens, under section 194. But wages and gratuitous and charitable relief were disbursed directly by Bikanir State Agency under the general supervision of my Sub-divisional Officers.

5. *Departures from the prescriptions of the Punjab Famine Code.*—On the Ghaggar Canals these departures were as follows:—

(*i*). *Modification of section 126, arrangements on first admission.*—The Ghaggar Canals run along both banks of the river; there is thus seldom more than a distance of three or four miles between the canals. When we first began work, new comers occasionally went backwards and forwards from one canal to the other; also sometimes from one camp to another on the same canal—in order to draw the minimum wage at each place. This practice was put a stop to by paying new comers in grain. In some cases *chappatis* freshly made, every morning, were issued on arrival.

These arrangements were found to be a distinct advantage.

(*ii*). *Modification in classification of relief workers.*—Section 115 of the Punjab Famine Code lays down the classification as under:—

A.—Professional labourers.

B.—Labourers not professional.

C.—Able-bodied, but not labourers.

D.—Weakly.

At first all applicants employed as relief workers were classed as above. The works were opened in good time; so there were very few weakly applicants. Owing to the inhospitable character of the tract through which the canals passed and its distance from large towns, there were only a very few who could be put under Class C. In most cases it was found possible to employ indigent applicants, coming sometimes from very long distances—who were not accustomed to manual labour—as writers on the work charge establishment.

The vast majority of relief workers were thus, rightly I think, put into Class B. Later on, when some workers in Class B became more accustomed to the particular kind of labour required, and were actually turning out tasks on a *par* with professional labourers, those found sufficiently efficient were promoted to Class A.

This was permissible under section 127 of the Punjab Famine Code, but our Class A then included relief workers who could hardly be termed professional labourers.

(*iii*). *Modification in system of wages.*—The system employed on the works in my charge was as laid down by R. Clarke, Esq., C.S., Commissioner and Superintendent,

Mr. C. J. Floyd.

4th April 1898.

Delhi Division. It may be described in Mr. Clarke's own words as follows:—

"There is no absolute rule for fixing the relative wages of the four classes; but with a 9-seer rate what I should do is to calculate the full wage. It comes to 2 annas 4 pies,* and to get rid of the odd pies in payment each class would diminish by a pice, and the wage would stand thus:—

* *Vide* ready-reckoner attached to Appendix D of the Code.

	₹	a.	p.
A males	0	2	3
B „	0	2	0
C „	0	1	9
D „ and minimum	0	1	6

"Women should get 1 pice less in each class:—

	₹	a.	p.
A females	0	2	0
B „	0	1	9
C „	0	1	6
D „ and minimum . . .	0	1	3

"Working children should receive R0-1-3 and R0-1-0.

"These wages should be increased or decreased whenever the full wage worked out a pice higher or lower—to the extent of one pice and so on."

On the Ghaggar Canals wages were always calculated on the price of the staple flour obtainable on the works, because flour is the principal item in the ration prescribed by Government (*vide* Chapter VII of the Code). It was accordingly found that the money equivalents noted in Appendix D of the Code were about a pice higher than the wage obtained by making a detailed calculation of the cost of the various items included in the prescribed ration. The scale of wages was then reduced by 1 pice for all classes, males and females, with the exception of A males, as it was considered desirable to attract good diggers to the works so as to improve the outturn.

Wages paid to certain A Class workers were further enhanced in consequence of the introduction of a bonus system under which A Class diggers were allowed a bonus of 1 pice for every 25 cubic feet earth dug over and above the full task prescribed. As tasks were allotted to A diggers or so, who with their carriers made up the working party or sub-gang, the bonus could not be earned unless the quantity of earth dug in excess of the task fixed, worked out to 25 cubic feet at least for each digger in the sub-gang.

(*iv*). *Abolition of the Sunday wage.*—The Sunday wage was stopped, for relief workers under Classes A, B and C in British territory, with the permission of the Deputy Commissioner, District Hissar.

Any relief workers who chose to do so were permitted to work on Sunday and paid as for week days.

All relief measures employed on the works in my charge were Code measures authorized by the local Famine Code as it stood before the famine began.

The alternative system of relief to dependants and non-working children under sections 140A and 141 was abandoned, to a certain extent, in British territory upon the introduction of kitchens under section 194. These kitchens were run by the Civil Department.

On the northern Canal the first kitchen was opened in February 1897 and on the southern Canal in March 1897. Later on more kitchens were introduced on both the Canals.

I am of opinion that kitchens should be opened at the very commencement of any large relief work, and that poor-houses should also be opened where adult dependants could be properly looked after.

The distressed classes of course preferred the alternative system of cash payments. The little ones at any rate were well cared for, but there were, at some of the relief camps at all events, several attempts to obtain this relief for other people's children besides those of the relief workers.

Kitchens were found useful in stopping this abuse.

Degree of success which has attended the relief measures adopted, considered primarily with regard to relief of distress and the saving of human life, and secondarily with regard to economy.

1. The works in my charge, as stated before, were situated in the Sirsa Tahsil of the Hissar district, also in the Hanumangarh Tahsil of the Bikanir State.

In the Sirsa Tahsil the area affected was 1,182 square miles. The population of the distressed area is about 150,000. The area of the Hanumangarh Tahsil is 636,421 acres, *i.e.*, 994 square miles, and the population is only 37,459.

2. *Extent and severity of the distress.*—The situation for the Province as a whole was discussed in Revenue Secretary's letter No. 13, dated 23rd November 1896, to the Secretary to the Government of India, Revenue and Agricultural Department, published as Punjab Government Notification No. 99, dated 9th December 1896.

Information on most of the points raised in questions Nos. 2, 3, 4 and 6 issued by the Famine Commission of 1898 may be obtained by referring to the Notification in question.

I might add, from my own knowledge of the Hissar district extending over a period of about 7 years, that the prices of food-grains in the latter part of the year 1896 were very much higher than in other years, *e.g.*, gram used to sell at 40 to 45 seers per rupee, but in 1896 the selling price fell to 9 seers per rupee, and under. Bajra, the staple grain in Sirsa Tahsil, rose to four times the normal price. The situation, moreover, was much aggravated by a fodder famine.

Under normal conditions the population of the affected area may be considered to enjoy a fair measure of well-being.

About one-fourth of the population of the Sirsa Tahsil are known as Pachadas. These people are, for the most part, ordinarily in an unsatisfactory and precarious condition, due to their being improvident, indifferent cultivators, naturally idle, and addicted to cattle-lifting.

In addition to the Pachadas, the menial classes in each village are badly off. Very few have any reserves of money and grain. These menial classes are generally paid in kind for various services by zamindars and others. In bad agricultural years they are put to great straits, as many of the services for which they earned a daily dole in years of timely and sufficient rainfall are not required of them when the rains fail.

With the exceptions above noticed, *viz.*, the Pachadas and the menial classes, the other sections of the population of Tahsil Sirsa are fairly well off, with reserves of money and food sufficient to support themselves in the event of failure of as many as three consecutive harvests.

3. As regards Bikanir territory, my experience is rather limited. The Bagris are even worse off than in the Sirsa Tahsil; but on the other hand most of them are accustomed to migrate long distances wherever work may be open—when one harvest fails—to earn a little before the next rains are due.

Some of the villages in Bikanir territory along the Ghaggar have a Mahommedan population owning a fair number of cattle, but most of the villages had very few inhabitants. Many had left their homes in quest of work.

4. *Sufficiency and economy of the relief measures.*—My experience in the late famine was that the percentage of the population of the affected tracts in the Hissar district who sought relief during the worst months of the famine ran up to 16 per cent.; while for the Sirsa Tahsil alone the proportion was as high as 25 per cent.

For a whole Province I am of opinion that the standard of 15 per cent. of the population of the distressed area adopted by the Famine Commission of 1879 would be a safe one.

5. On the Ghaggar Canals the relief figures in British territory were in March 1897, 33,000, of which 11,500 were non-working children and dependants. This is about 22 per cent. of 150,000, the population of the distressed area in Tahsil Sirsa. But in addition to the Ghaggar Canals the Civil Department were also carrying out some other relief work in the Sirsa Tahsil.

6. On the works in my charge I am of opinion that some applicants for relief were not really in need of relief. But they did not stay very long after a few days experience of tasks fixed and scale of wages allowed. They probably came to see what was going on because others from the same or neighbouring villages had come.

7. I do not think that a larger proportion of the population might have been relieved consistently with the object of saving life and preventing great suffering. All who applied for relief and cared to go through the tasks fixed obtained relief.

8. I am of opinion that the relief arrangements were sufficient and well adapted to the requirements of those who applied for relief on the Ghaggar Canals. I think, however, that one poor-house at least might have been opened with advantage on both the Ghaggar Canals. In fact, I am

strongly of opinion that poor-houses and kitchens should always be opened simultaneously with any large relief work.

9. On the Ghaggar Canals in British territory the total number of units relieved in 41 weeks from December 1896 to September 1897 were :—

	2,733,134 workers.
	* 979,440 dependants and non-working children.
Total	3,712,574

* Excluding those relieved in kitchens.

The number of deaths in the whole of this period of 41 weeks were 350, *i.e.*, 8·5 per week, giving a death-rate of 0·09 per 1,000 per week of the population on the works.

This is well under the normal death-rate of the Province, and judged by the above percentage the relief given has been successful in its object.

10. The system of cash payments under sections 140A and 141 of the Famine Code was stopped to some extent with the opening of kitchens referred to in another portion of this note. This change was followed by large decrease in the number of dependants and non-working children on our rolls, many of whom left the works or were not taken up for relief to the kitchens by their parents or guardians.

I have not the figures of those relieved in kitchens along the Ghaggar Canals, but our returns for British territory (where alone kitchens were opened) showed a great reduction in the usual proportions of dependants and non-working children to relief workers, *e.g.*, the attendance during February 1897 and up to 20th March 1897 was as follows :—

Workers	854,773 units,
Dependants and non-working children	397,016 „

the latter class being therefore 46 per cent. of the workers.

The number relieved from the 28th March to 18th September 1897 were :—

Workers	1,296,309 units,
Dependants and non-working children	383,082 „

showing that the proportion of dependants to workers fell to 30 per cent.

11. This change at first had the effect of excluding from relief some really needy cases due to their own obstinacy or conservatism. There were many attempts to avoid the restraints of kitchens by the parents and guardians of non-working children on relief work leaving the vicinity of a kitchen and going off to some other camp where no kitchen had so far been opened. Many of the difficulties experienced and imagined by the relief workers might have been avoided had the kitchens been opened simultaneously with the relief works.

I do not think the above change had any connection with the death-rate which increased among the children, especially in the very hot weather, and dropped again when the rains set in.

12. The self-acting tests to prove necessity laid down by the Famine Commission of 1879 were observed to the fullest extent on the works under my charge in the late famine. All those persons who could do a reasonable amount of work were required to work as a condition of receiving relief. All women, and children over 7 years of age, when in good health and capable of labour, were required to work for the wages paid to them.

13. The number of destitute persons to whom the labour test could not be applied were very few.

In British territory out of 979,440 units non-working children and dependants relieved, only 101,483 were adult dependants, the remainder being non-working children under 7 years of age. Compared with the total population of the affected area in Sirsa Tahsil, *i.e.*, 150,000, the adult dependants relieved $\frac{101,483}{41 \times 7}$ were on the average 354, which is only 0·23 of the population of the affected area.

The non-working children relieved in the same period were $\frac{877,957}{41 \times 7}$, *i.e.*, 3,060, or 2 per cent. of the distressed area.

The proportions to numbers relieved on works are—

For British territory—

Adult dependants . . .	101,483 units.
Workers	2,733,134 „
or 3·7 per cent.	
Non-working children . .	877,957 „
Workers	2,733,134 „
i.e., 32 per cent.	

For Bikanir territory—

Relief workers . . .	1,022,834 units.
Non-working children and dependants . . .	417,655 „
i.e., adult dependants . .	10,020 „
Non-working children . .	407,635 „

The proportions to the numbers relieved on works were 1 per cent. in the case of adult dependants and 40 per cent. in the case of non-working children.

14. The proportion of adult dependants to workers was low, but that of non-working children very high.

This was no doubt partly due to relief workers bringing other people's children with them in addition to their own. I think, however, that this could not have been done to any large extent, but that the startling proportion of non-working children to relief workers was due more to the unrestrained fecundity of the labouring classes.

This opinion appears to be borne out by the following statistics :—

British territory.—Total number of units workers relieved in 41 weeks were 2,733,134. Of these 470,249 units consisted of working children, leaving 2,254,885 units adult workers. The non-working children relieved were 877,957 units, or one child under seven years for every 2½ adult workers.

The Pachadas had large families, also the menial classes.

Bikanir territory.—The working children relieved were 115,884 units out of a total number of 1,022,834 workers, leaving 906,950 units adult workers. The non-working children relieved were 407,635 units, or one child under seven years of age for every 2·2 adult workers.

The Bagris have smaller families or brought fewer children to the work owing to the longer distance they had to travel.

15. In my opinion the conditions of task and wage have been such as to constitute a stringent test of necessity. There has been a reserve of power with the carriers.

16. The wage has erred on the side of liberality in the case of large families. Some families of sweepers were ascertained to have been earning ₹18 per mensem!

17. The only large work in the Sirsa Tahsil or Sub-division was the Ghaggar Canals.

18. Most of the relief workers and their dependants resided on the work, except when relief camps happened to be close to large villages like Rania on the northern Canal. The people would prefer to get back to their homes for the night. Residence on the works may, I think, be taken as one of the effective tests of necessity.

19. The table herewith attached marked No. 2 gives statistics showing the highest percentages on the total population of the distressed area of persons relieved (dependants being excluded) in the worst months of the famine.

I have no statistics at hand of previous famine in the Province.

20. My experience in the present famine was that once it became known the works were open, large numbers came flocking in. Many of the new comers were from Bikanir territory.

I think the people were well treated, but not too liberally. Many left our works in the very hot weather for other relief works, such as tanks nearer home. Some went away to the Western Jumna Canal cuts, where the work promised to last longer and climatic conditions were more favourable.

21. The kitchens on the Ghaggar Canals, in British territory, were managed by the Civil Department. Residence at the kitchens was not a condition of relief, which was given in the shape of cooked food.

22. I have no experience of what is known as the "village system."

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23. The gross cost of direct famine relief on works in my charge has been—

For British territory ₹3,97,330-0-11.

Abstract of cost of direct famine relief.

British territory—	₹	a.	p.
Wages to labourers . .	2,75,716	10	10
Work charge establishment .	20,884	13	10
Hutting	24,890	4	5
Charitable relief of all kinds .	39,570	2	2
Miscellaneous charges* . .	36,368	1	8
TOTAL .	3,97,430	0	11

* Includes ₹16,243-1-3 paid for completing by *ordinary* labour, work left unfinished by famine labourers.

Total units relieved, including dependants and non-working children, were 3,712,574.

Cost of relief per unit 1 anna 8 pies.

For Bikanir territory.—The gross cost was reported to be ₹1,71,710-12-6.

Bikanir territory—

Information not quite complete, but approximately as under—

	₹	a.	p.
Wages to labourers . .	1,05,166	13	10
Work charge establishment .	14,165	0	0
Hutting	13,724	2	8
Charitable relief of all kinds .	20,749	10	4
Miscellaneous charges .	17,905	1	8
TOTAL .	1,71,710	12	6

Number of units relieved, including dependants and non-working children, were 1,440,489.

Cost of relief per unit 1 anna 10 pies.

The cost of relief has been largely enhanced by the climatic conditions, which have been described by Mr. Higham as under—

"During the months of May and June the heat is greater than in almost any other part of India, and there are perpetual sandstorms night and day.

"Free labour does not work at all in these parts at this season of the year."

At most of the relief camps there was no water of any kind available. Many wells had to be dug, and close to the Bikanir border water had to be carried on camels for use of relief workers.

Shelter had to be provided for the entire establishment as well as for relief workers.

24. I know of no important matter in which the scheme of relief measures prescribed by the Code is seriously defective.

Advice as to measures and methods of working which seem likely to prove most effective in future in these two respects.

1. *Classification of relief workers.*—Mr. Higham's proposed classification should, I think, be accepted, *viz.*—

Class I.—Special.

Class II.—Diggers.

Class III.—Carriers.

Class IV.—Working children.

On the Ghaggar Canals it was my experience that some encouragement or incentive to work should be held out to relief workers. I would therefore make it feasible that specially good diggers in Class II may be promoted to Class I.

For Class III carriers, I would propose two grades. All carriers at starting would be put into the lower grade. Special diligence would be rewarded by promotion to the higher grade. Carriers in both grades would be returned under Class III.

The majority of our relief workers were in two Classes, A and B. We also had a special class such as A males earning a bonus for extra work, mates, etc., drawing additional wages who were all included in Class A.

Statistics of various classes of relief workers on the Ghaggar Canals with sexes of adult workers are given in the accompanying statement marked No. 3.†

† Not printed, as the figures are given in paragraph 10 of this note (page 19).

2. *Scale of wages.*—The result of calculations I made in February 1897, as to the money value of the flour and of the minor items in the rations prescribed in Chapter VII of the Famine Code, established the following proportions of the subsidiary items to the grain item, *viz.* :—

In the case of the full ration—

For a man 50 per cent. of the grain item.

For a woman 47 per cent. of the grain item.

For a child 36 per cent. of the grain item.

In the case of the minimum ration—

For a man 32 per cent. of the grain item.

For a woman 29 per cent. of the grain item.

For a child 23 per cent. of the grain item.

I am of opinion, therefore, that the money equivalent of 50 instead of 75 per cent. addition to the grain item in the ration would, for all prices of grain 12 seers and under per 1 rupee, more closely represent the money value of the ration, calculated out in detail.

If the classification of relief workers be amended as proposed, the scale of wages I would recommend is as under :—

For Class II, Diggers, the wage should be the money equivalent of the full male ration, *i.e.*, of 12 chattaks plus 50 per cent., or 18 chattaks of the staple grain. With a 10-seer rate this would mean ₹0-1-9.

For Class I, Special, the wage may be 10 per cent. higher than for Class II, or the money equivalent of 20 chattaks of grain. With a 10-seer rate this would mean ₹0-2-0.

For Class III, Grade 1, I would propose the full female ration, *i.e.*, the money equivalent of 15 chattaks (10+50 per cent.) of the staple grain. With a 10-seer rate this would mean ₹0-1-6.

For Class III, Grade 2, I think the money equivalent of 12 chattaks of grain would be sufficient. With a 10-seer rate the wage would be ₹0-1-3.

For Class IV, Working children between the ages of 7 and 12 years, I think the money equivalent of 12 chattaks of grain should be allowed.

There are growing children who require to be well nourished. They are usually kept hard at work by their parents or guardians.

The grain item in the ration prescribed by Goverment is 9 chattaks full and 6 chattaks minimum. The mean may be taken as 8 chattaks, and 50 per cent. extra would bring up the wage to 12 chattaks as recommended by me. With a 10-seer rate this would be ₹0-1-3 as above.

It is unnecessary I think to make any distinction in wages between men and women in the same class or grade. Boys and girls over 12 years of age should be classed as adults; children over 7 should only be classed as working children and paid as such when really able to carry.

The minimum wage inasmuch as it is intended to be used by way of punishment for short work should be a real hardship. And I would accordingly propose the following scale :—

Class I.—The money equivalent of $15\frac{1}{3}$ chattaks of grain. At 10 seers per rupee this would mean ₹0-1-6.‡

Class II.—The money equivalent of 12 chattaks of grain. At 10 seers per rupee ₹0-1-3.

Class III.—The money equivalent of 10 chattaks of grain. At 10 seers per rupee ₹0-1-0.

Class IV.—The money equivalent of $7\frac{1}{3}$ chattaks of grain. At 10 seers per rupee ₹0-0-9.

The penal ration for classes I, II and III should I think be the equivalent of 9 chattaks of grain. This should be disbursed in kind or as cooked food—not oftener than three days in a fortnight.

3. *Dependants and non-working children.*—Relief to this class should, I think, be administered in the form of cooked food and not as a cash dole. They should be made to attend at poor-houses or kitchens for relief.

The wage of adult dependants should be the equivalent of $10\frac{1}{3}$ chattaks of grain. They do no work and take very little exercise.

For non-working children the wage may be the equivalent of 5 chattaks of grain, *i.e.*, ₹0-0-6 with a 10-seer rate.

‡ In all cases where fuel could not be easily picked up, I think the Deputy Commissioner should be authorised to sanction half an anna per day extra in each family, (separate *chula* or fireplace) to procure the necessary fuel chargeable to charitable relief.

4. *Standard tasks.*—I noticed on the Ghaggar Canals for leads up to 75 feet and 2 to 3 feet lift, that the average time taken by carriers was 1¼ minutes per trip.

Assuming six hours continuous work as a fair average task for a famine works carrier, then 288 basket loads would be carried in a day, or, taking the average basket loads as ⅓ cubic foot, 96 cubic feet would have been carried. I accordingly agree that the ordinary famine task per carrier unit should be fixed as ascertained by Mr. Higham at 100 cubic feet, carried a distance of 100 lineal feet.

I would calculate a working child as 1 carrier unit because the weight of the earth to be carried often varies considerably. For short leads working children often carry much better than some adults, inasmuch as they make more trips although carrying a lighter load.

I think that a distance of 12 feet horizontal lead may be taken as equivalent to 1 foot vertical lift. Conditions of lead and lift would vary on every work, and perhaps every relief camp, so the tasks allotted would have to be very carefully explained.

I think it would be possible to frame simple rules for the guidance of the ordinary works establishment to arrange for the disposition of labour so as to secure the best proportion of carriers to diggers.

Using Mr. Higham's notation in his calculation for finding the reduced lead, I think the reduced lead in feet might be taken as the horizontal lead in feet, plus the vertical lift in feet multiplied by 12,

i.e., R=H+12 V.

I think the best unit for task-work is the sub-gang containing 3 or 4 diggers and their complement of carriers, making up about 12 workers.

A family party should not be broken up.

All the members of the sub-gang should be liable to a fine if the task is not performed.

The task of diggers would vary with the nature of the soil excavated.

5. I think the minimum age of working children should be 7, but even then only when the child is capable of doing light work. It is difficult to tell the age of some children, and the test should be the child's capability to work.

6. The minimum wage should be paid to labourers who fail to do the task set to them. If they habitually fail, their Sunday wage should also be stopped.

7. On the Ghaggar Canals the penal wage was never enforced, but it may be well to keep this punishment in reserve.

8. The Pachadas were the only relief workers among whom any number were kept on the minimum or D Class wage for a continuous period. The punishment did not result in enfeebled health.

9. If the facilities suggested by me are permitted, *i.e.*, if diggers in Class II can qualify for promotion to Class I and carriers in Grade 2, Class III, can be promoted to Grade I, I think relief workers would not be able to earn more than the normal wage. Famine relief work requires a sustained effort on the part of the labourers if tasks are properly set and enforced.

10. The proportion of adult male workers to women and children on the Ghaggar Canals has been as follows:—

British territory—	
Males	1,150,511 units.
Women	1,104,374 „
Working children	470,249 „
Bikanir territory—	
Males	459,580 units.
Women	447,370 „
Working children	115,884 „

British territory—	
A Males	402,506
B „	616,262
C „	69,179
D „	62,564
TOTAL	1,150,511
A Females	479,601
B „	531,643
C „	38,106
D „	55,024
TOTAL	1,104,374
Bikanir territory—	
A Males	175,000
B „	180,974
C „	53,536
D „	50,070
TOTAL	459,580
A Females	181,848
B „	185,356
C „	44,635
D „	35,501
TOTAL	447,370

11. *As to the Sunday wage.*—I think relief workers should ordinarily not be permitted to work on Sundays.

One day's rest in seven is very essential to give the labourers a chance of bathing and washing their clothes. It would also help many to pull themselves together, especially those who are not accustomed to continuous exertion.

On the Ghaggar Canals when the Sunday wage was stopped those who elected to do so were allowed to work on Sundays, for such work they were paid at work day rates.

In the case of fairly large families there is no doubt that they can earn more than enough during the week to support themselves on Sunday without the Sunday wage. This would not be the rule with small families, and hence permission was given to work on Sunday when the Sunday wage was stopped.

One of the difficulties of the famine officer is to devise some plan to make habitual shirkers exert themselves to earn more than the minimum wage. I would accordingly propose that the Sunday wage should take the shape of a cash allowance of 1 anna per head for all relief workers in Classes I, II and III who are not being constantly fined for short work. I would propose also that this allowance be paid on the first wage day following four Sundays spent on the relief works.

12. *Piece-work as an alternative to the task-work system.*—Piece-work would of course be cheaper than task work. At least 25 per cent. of the work-charge establishment necessary for task-work might also be saved, even when the work is given out to gangsmen instead of to petty contractors.

There are many labourers who do not mind their wages being clubbed together, and who quietly take their earnings through a headman; there are others who will not quietly submit to this procedure without constant wrangling. The latter class are chiefly those who have not been accustomed to work under contractors. There were many such on the Ghaggar Canals, and must necessarily be found on most relief works. This is one of the greatest objections to piece-work.

Another drawback is the difficulty in ensuring regular and correct payments to the labourers.

Moreover, in the piece-work system all applicants would most probably not be employed.

If the piece-work were being carried out on famine principles the labourers would require to be classified and famine returns submitted as in the case of task-work.

It would also be necessary to adjust rates paid from time to time, so that the average earnings of labourers did not fall short of the money equivalent of the famine rations.

Of course, if these precautions were neglected and no relief given to dependants and non-working children, then the work would be nothing more than an ordinary contract.

I do not think it would be advisable to try both systems of piece-work and task-work at the same time on the same work, or on separate works not far from each other.

I quite agree that test works should be opened on the piece-work system, and rates for test work be pitched lower than the normal.

If there is no doubt about there being a famine, and some suitable productive work can be commenced immediately, I fail to see what there is to be gained by completing it at a cheaper rate by piece-work than as task-work. If the distress is real, the full number of those feeling the pinch of scarcity must be expected to apply for relief, and if not given on the work in question, it would probably be necessary to employ the weakly balance on some other unproductive work which may in addition entail further expenditure upon maintenance.

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Thus the ultimate cost of the first work would probably be the same very nearly as if task-work had been in force, and no risks would have been run by any needy applicants being refused relief.

13. *As to large and small works and the distance test.*—I think residence at large relief-works should be made compulsory.

14. The distance test was not applied in the case of the Ghaggar Canals. All applicants were employed.

It is my experience that distressed labourers often travel long distances in quest of work. The Bikaniris go out over 100 miles from their homes *by road* for a few months of the year and return before the next rains set in. I noticed in the case of new comers, when they found friends or caste-fellows or perhaps relatives at any relief camp, that they objected to be sent on elsewhere.

When the question of drafting labour from the Ghaggar Canals, which were nearing completion, to the Western Jumna Canal Cuts-off was being discussed, many of the labourers expressed their willingness to undertake the journey by road and railway.

Much depends when dealing with large bodies of native labourers upon the example set by a few and upon the degree of confidence inspired in their minds by the officials under whom they have lately been working. If accompanied by a popular official I think it would be quite feasible to draft labourers a considerable distance by rail, their return journey would require to be guaranteed, and arrangements made for their return home before the rains.

15. On the Ghaggar Canals residence on the works was the rule rather than the exception, but such residence was not made a definite condition of relief as I think it might have been.

16. I think high tasks and low rates of wage are very efficient tests, but residence on the work is also desirable for many reasons.

In the case of widespread famine I think it scarcely possible that a sufficient number of works could be arranged for so as to allow the majority of workers to return daily to their homes.

No reduction in the task of relief workers was made in the case of those who elected to go home daily. In some instances such workers, who under practice of coming very late in hopes of drawing the minimum wage, were only paid for one-half the day.

17. On the Ghaggar Canals we first began putting up expensive huts on raised earth plinths. These were found unsuitable and the cost prohibitive as well as unnecessary. Sirkhis and bamboos were then issued to each family, who made their own arrangement under supervision of the Sub-divisional Officer.

In Bikanir territorry hutting cost R13,724-2-8, or 1·8 pies per unit relieved.

The total cost of hutting on the works in British territory has been R24,890-4-5, or 1·2 pies per unit relieved. The above charges included the cost of shelter for establishment and for hospitals and kitchens.

The health of the labourers was very good. When necessary, blankets were provided. A certain number of blankets were supplied by the Indian Charitable Relief Association. All relief workers brought a sufficient number of wraps with them, having come out prepared for roughing it. They suffered discomfort when it rained in the winter, it is true, but dried themselves and their belongings at the first opportunity at large camp fires. All wandering nomads are accustomed to fare no better than this.

18. On large relief works, I am of opinion, that the special arrangements indicated in section 145 of the Punjab Famine Code should always be made and grain contractors appointed to retail grain, *gur*, etc., at relief camps under licenses, who would be liable to certain penalties in the event of insufficient quantity or inferior quality of grain being sold.

19. *Relations of Civil and Public Works officers in connection with the management of relief works.*—The classes of relief works which in my opinion may be most conveniently carried out by the Civil officers are—

(*i*) Small works executed at the cost of District or Municipal Funds for which it is inconvenient to provide professional supervision.

(*ii*) All other measures of relief other than the direct management of relief works when put in executive charge of a Public Works officer.

The usual administrative control in the case of ordinary Public Works vested in Commissioners and Deputy Commissioners must continue to remain in their hands in the case of relief works also.

The Executive Engineer is responsible to his departmental superiors in all matters in which his responsibilities have been laid down in the Public Works Department. In addition to the above he is jointly responsible with the Deputy Commissioner under section 57 of the Punjab Famine Code for seeing that the relief works do not fail in their object. He is also jointly responsible with the Deputy Commissioner for maintenance of efficient relief programmes.

An Executive Engineer's Sub-divisional Officer *qua* officer in charge of a relief work is responsible under sections 122-152 of the Code.

In my humble opinion it seems invidious to attempt to draw a sharp line between the respective responsibilities of the Deputy Commissioner and the Executive Engineer.

The Deputy Commissioner is the head Revenue Officer of the district, and must continue to control relief operations in his district.

Under section 58 the Executive Engineer is subordinate to the Deputy Commissioner as to all matters not professional. Of course a difference of opinion may arise as to the interpretation to be put on the word professional, but no such difficulty arose on the Ghaggar Canals.

20. I do not think it desirable that any powers of control reserved to the Deputy Commissioner should, *as a general rule*, be delegated to, or exercised by, his assistants in the case of works carried out under the agency of the Public Works Department.

21. Any Civil Department subordinate attached to relief works under management of a Public Works Department officer, should be placed under the direct orders of the Public Works Department Sub-divisional Officer in charge of the relief work.

22. On the Ghaggar Canals the Sub-divisional Officers were invested with magisterial powers which had an excellent moral effect. I attribute the absence of criminal offences almost entirely to this strengthening of the hands of the Public Works Department officers. The powers were granted on the representation and recommendation of the Deputy Commissioner.

23. I think during times of famine some special legislation is necessary so as to prevent the sale of inferior and damaged grain to relief workers; also to enable District authorities to send wanderers without any apparent means of support and contumacious labourers refusing to work, to poor-houses.

Other recommendations or opinions thought likely to be useful in future famines.

1. The average number of workers for whom employment could daily be provided in a satisfactory way on an ordinary village tank is 250 souls. Professional supervision of even a general kind could be secured by applying to the nearest Executive Engineer.

In the case of one of the tanks in my charge, situated close to a large village, I anticipated there would be far more applications than could be usefully employed on the tank. The difficulty was met by informing all comers as well as the headmen of the village that only a certain number would be employed on the tank, and any applicants after that number had been filled would be sent elsewhere.

2. I think labourers on task-work should be paid twice a week, or certainly not at longer intervals than once a week.

Gangsmen on piece-work need not be paid oftener than once a week or not at longer intervals than once a fortnight.

In task-work I would adopt the pice unit for payment.

3. I think payments should be made by cashiers, who may be Naib-Tahsildars, or men supervised by Naib-Tahsildars, under the direct orders of the Public Works Department Sub-Divisional Officer in charge.

As to my recommendations for verbal amendments to the Punjab Famine Code and modifications suggested in the forms used, I would refer to notes in reply to Financial Commissioner's Circular, which I understood were forwarded to the Local Government.

TABLE No. I.

Famine Relief Work, Ghaggar Independent Sub-Division, during 1896-97.

PARTICULARS OF WORK.	NATURE OF WORK.	DETAILS OF WORKING RATES. Expenditure on wages after deducting 1/7th for Sunday wage.	Quantity of work done.	Rate per unit of work for wages only.	Total expenditure.	Rate calculated on total expenditure.	Normal rate.	RELIEF WORKERS. Units.	Average earnings.	REMARKS.
British Territory, Northern Ghaggar Canal Sub-Division.		₹ a. p.	C. ft.		₹ a. p.					
Northern Ghaggar Canal 228 miles; north river embankment ¾ mile; Anakai Jhil Drain, 8 miles; Abholi minor distributary, ¼ mile.	Earth-work . . .	83,937 15 10	22,501,000	R3-11-8 per 1,000.	1,42,687 3 0	R6-5-5 per 1,000.	R2-14-0 per 1,000.			
Service road and jungle clearance, 22·8 miles	Earth-work and removing jungle.	4,628 0 0	Miles. 22·8	R204 per mile.	6,362 7 6	R280 per mile.	R160 per mile.			
Special roads along canals, 20 miles, and 3 tanks.	Earth-work . . .	8,637 4 1	C. ft. 2,799,000	R3-1-3 per 1,000.	15,443 12 9	R5-8-0 per 1,000.	R2-14-0 per 1,000.			
TOTAL .	.....	97,243 3 11	...	...	1,64,493 3 11	...	...	1,170,596	R0-1-4	
British Territory, Southern Ghaggar Canal Sub-Division.										
Northern Ghaggar Canal near head: Southern Ghaggar Canal, 20·8 miles; south river embankment, 2 miles; distributaries, 18 miles; head works, foundations and approaches, river training.	Earth-work . . .	1,07,278 12 9	C. ft. 28,230,000	R3-12-9 per 1,000.	1,72,359 7 5	R6-1-8 per 1,000.	R3-2-0 per 1,000.			
Service roads and jungle clearance . .	Earth-work and removing jungle.	5,640 0 0	Miles. 20·8	R270 per mile .	6,580 0 0	R271 per mile	R160 per mile			
Head works—unskilled labour . . .	Masonry work of sorts .	11,144 15 5	C. ft. 211,062	R5-4-0 per 100	13,002 7 4	R6-2-6 per 100	R3-0-0 per 100			
Making surkhi	Pounding surkhi . .	1,052 9 2	14,418	R7-11-0 per 100.	1,228 0 0	R8-8-0 per 100	R7-0-0 per 100			
Breaking ballast	Breaking ballast . .	116 9 2	4,848	R2-6-0 per 100	136 0 0	R2-12-0 per 100.	R1-12-0 per 100.			
TOTAL .	.....	1,39,085 5 5	...	...	2,32,836 9 8	...	...	156,538	R0-1-5	
GRAND TOTAL FOR BRITISH TERRITORY	.....	2,36,328 9 4	...	...	3,97,329 13 7	...	...	2,733,134	R0-14-6	
Bikanir Territory.										
Northern Ghaggar Canal, below the border . . . 29·2	Earth-work . . .	90,143 0 5	C. ft. 25,784,000	R3-8-0 per 1,000.	1,71,710 12 6	R6-11-0 per 1,000.	R2-12-0 per 1,000.	1,022,834	R0-1-4·8	
Southern Ghaggar Canal, below the border . . . . . 22·0										
TOTAL MILES . 51·2	-									

N.B.—The price of the staple flour obtainable at relief camps varied from 7 to 10 seers per rupee.

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No. 2.

Statement showing Relief Workers during periods of maximum pressure on Ghaggar Canals.

Period.	British Territory.		Bikanir.		Remarks.
	Average number of relief workers in the week.	Percentage of population of affected tract (150,000).	Average number of relief workers in the week.	Percentage of population of affected tract (37,459).	
2nd January 1897	7,786	...	...	...	As regards British territory the actual numbers of relief workers on week days were about $\frac{1}{7}$th higher than noted herein after the Sunday wage was stopped.
9th „ 1897	10,794	...	...	...	
16th „ 1897	12,874	...	...	...	
23rd „ 1897	13,822	...	...	..	
30th „ 1897	14,594	9·6%	6,041	16%	
6th February 1897	15,747	10·5%	7,487	20%	
13th „ 1897	15,470	10·3%	8,019	21%	
20th „ 1897	17,273	11·6%	8,160	22%	
27th „ 1897	18,357	12·2%	6,942	19%	
6th March 1897	17,589	11·7%	7,127	19%	
13th „ 1897	19,776	13·2%	8,180	22%	
20th „ 1897	17,770	11·8%	7,764	21%	
27th „ 1897	17,544	11·7%	8,122	21%	
3rd April 1897	15,758	10·5%	7,674	21%	
10th „ 1897	15,473	10·3%	7,102	19%	
17th „ 1897	15,456	10·3%	7,205	19%	
24th „ 1897	15,413	10·3%	6,032	16%	
1st May 1897	15,261	10·2%	6,052	16%	
8th „ 1897	15,064	10·0%	6,611	18%	
15th „ 1897	13,174	...	5,998	16%	
22nd „ 1897	12,800	...	..	...	
29th „ 1897	10,478	...	...	...	
5th June 1897	9,648	...	...	...	
12th „ 1897	...	...	...	...	
19th „ 1897	...	...	...	...	
26th „ 1897	...	...	...	...	

(*President.*)—You are Executive Engineer in the Irrigation Department?—Yes, Sir.

During the famine you were officer in charge of the Ghaggar Canal works?—Yes, Sir.

Had you any previous knowledge of famine work?—Yes, I had been employed on famine work in Sitamarhi, in the Mozufferpur district, in 1889.

(*Mr. Higham.*)—Have you ever had any relief works before?—Yes, in Sitamarhi, in the Mozufferpur district, in 1889.

Were the works of the same character as you have had up here?—We had roads and tanks. Practically the same.

Did you work under any particular Code?—All work there was under the piece-work system, except one or two tanks afterwards under task-work.

What was the greatest number of workers you had on the Ghaggar Canal?—We had as many as 45,000, including work in Bikanir territory.

That was under four Sub-divisional Officers?—Yes, Sir.

Did each Sub-division consist of one camp only?—No, each Sub-division had seven or eight camps. Camps were three miles apart.

If you had 45,000 workers that would only give you an average of 11,000 in a Sub-division?—Yes, that is all. But in Bikanir there were only 10,000 in both Sub-divisions.

How many officers did you have in a camp?—On an average about two or three officers.

Did you have anybody in charge under the Sub-divisional Officer?—Yes, a subordinate officer in charge of each camp.

Did each Sub-divisional Officer have eight subordinate officials under him?—One of the Sub-divisional Officers had more.

Where did you get them from—the Public Works establishment?—Most of the men were temporary.

What class of men did you get?—There are always a number of subordinates such as Sub-Overseers looking out for work, and their applications are filed in offices.

Did you have any Civil officers in connection with the work—any Naib-Tahsildars?—Yes, we had one Tahsildar and one Naib-Tahsildar.

For each Sub-division?—No, for both Sub-divisions in British territory.

What were their duties?—They generally supervised payments and fixed the current rates for grain for the week.

Did they have anything to do with the classification of workers, etc?—No. When kitchens were started they had more Naib-Tahsildars, but they worked directly under the Deputy Commissioner.

What, had they to look after kitchens?—Yes, Sir.

Were these Naib-Tahsildars of any assistance? Was there any advantage having them on the works?—Yes, I think so.

In what way?—They looked after payments, and there was less chance of fraud.

Did they actually pay?—No, simply looked on while payments were being made.

Did they do it systematically or simply look round while payments were being made?—No, I believe they did it systematically, saw it paid, etc., and occasionally represented any irregularity they discovered.

They made a thorough inspection?—Yes, I had confidence in them.

Was it the habit to pay new-comers who came to the work a day's wage at starting?—Yes, when they first came they were paid strictly according to the Code. Afterwards we gave them grain instead of money and sometimes cooked food instead of grain.

Originally you gave them all money?—Yes, Sir.

Quite irrespective of the distance they had to come there?—Yes.

Or the condition they were in?—Yes, quite irrespective of anything.

According to the Code they got their day's wage: after 12 o'clock they got half the wage?—Yes, Sir.

However able-bodied they were, they got the full day's wage to start with?—Yes, Sir.

Was that found to be the best?—Yes, *i.e.*, grain and cooked food; they went from one camp to another, and sometimes from one canal to another. They ran quite close to each other.

Was the cash dole dropped altogether?—The cash dole was dropped. And they began getting cooked food.

Did everybody go for cooked food afterwards?—No, only just the ones badly off got cooked food.

Was that given under anybody's orders?—Yes, it was given under the orders of the Sub-divisional Officer. It was not given as a matter of course.

Did you control the price rate at which wages should be calculated?—No, that was controlled by the Tahsildar. He simply sent word every week saying that the rate for current week was so and so, and according to these rates and instruction issued by the Commissioner the week's wages were calculated.

It was left to the Tahsildar to report to the Sub-divisional Officer?—Yes, Sir.

You reduced the wages a pice all round because it would come a pice less if you calculated the value of the condiments?—Yes, Sir.

By whose authority was that done?—By authority of the Commissioner and Deputy Commissioner. No reduction was made when the Sunday wage was stopped, and the pice was put on again.

You gave your A workers something higher than the A wage?—We gave a few A workers something higher. The object was to try and make them dig full tasks.

If they did not dig the full task you would fine them?—Yes, but work was expensive and we were ordered to try experiments to improve the outturn, and one of the improvements we tried was to give a slightly higher wage to A Class diggers.

Why didn't you give it to all A Class diggers?—We gave it to A Class diggers who did extra work.

Then you practically tried to put A diggers upon piece-work?—Yes, that was the effect of it.

Was the arrangement advantageous? Did it reduce the cost of work?—Yes, it did. The outturn began improving.

What were you suffering from—not getting enough work from carriers?—Yes, that was the principal thing.

You mean to say that as men did more work the same number of carriers took it away?—Yes, Sir.

When did you abolish the Sunday wage?—We began with the Sunday wage. It was abolished in March or April, I think.

People were allowed to go to work if they chose to do so?—Yes.

Did not that involve your establishment being there?—No. The establishment were always there. They always have to work on Sundays.

They had to take the names of all attendants?—No, Sir.

How did you pay people who came on Sunday if you did not take their names down?—It was noted the next day. If they hadn't done work, they would have been paid a minimum wage.

You think kitchens should be opened at the very com mencement?—Yes, Sir.

And poor-houses for adults?—Yes. Some people on the works were almost beggars. They ought really to be sent to some large town. It would be more convenient if they had a poor-house to go to. They would be better looked after.

If you gave them food from kitchens, would not that do?—You could use a poor-house as a place of punishment for people who did not do their task. Kitchens are poor-houses—it is the same thing with a different name. I think there ought to be a place where relief workers who do not work could be punished. In poor-houses a residence is found for the relieved—in the case of kitchens only food is supplied without lodging.

You paid non-working children a cash wage. Do you think parents fed them properly?—Yes, Sir.

You introduced kitchens because children were suffering in condition, or simply because you thought too many came on to the works?—Yes, that is the reason, *i.e.*, because too many came on to the works.

Did many people object to sending their children to the kitchens?—Yes, they did.

Do you think that objection wore off after a little time?—Yes, I think so. They first tried to avoid doing so, and when they found they could not avoid it, they let them go.

Were there any particular classes who objected to their children going to kitchens?—No, I don't think children have castes.

Before you introduced kitchens children were about 46 per cent. of the workers?—Yes, Sir.

And after the kitchens had been introduced the proportion fell to 30 per cent.?—Yes, but this does not include children relieved in the kitchens themselves, because we had no account of them. So the difference was not so much as this.

What did the Public Works Department give the children?—We gave two pice each also.

You mean to say you had 383,000 units independent of the number in Civil Works kitchens?—Yes. Wherever there was a kitchen open we struck off all dependents at that camp.

Hadn't you all kitchens open by the 28th March?—No, Sir.

What should you say would be a fair proportion of non-working children to the number of workers?—Not under 25 per cent.

I suppose on the Ghaggar Canals almost all your labourers resided on the works?—Yes, Sir.

What arrangements did you make for them?—At first we built some huts, but they did not like them. They were very expensive. Then we issued *sirkhis* to each family. Also bamboos. These were supplemented with brush-wood and branches of trees.

When did you close works?—We closed works in September.

Village tanks were started about the month of May, were they not?—Yes. The numbers were reduced, but we did not drive anybody away till they went of their own accord.

I suppose the people who remained were from Bikanir or distant villages?—No. At the headworks we had a large number of people from adjoining villages and they stayed longest.

Did these people stay there all through the month of May without any shelter than those *sirkhis*?—Yes. But there happened to be a number of trees and a jungle close by.

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When did they work, in the day or night?—Very early in the morning and some at night, but very few.

Were they allowed to work at any time they liked?—Yes.

Did they knock off in the middle of the day for several hours?—Yes, Sir.

What, about, were their hours?—They used to work from 6 till about 12, and then again they used to work from about 3 o'clock till sunset. When they finished their work then they closed. They would do continuous work about six hours. I daresay they were about 8 hours altogether.

Not more than 8?—No, Sir.

At page 18 of your answers, you enter charitable relief of all kinds. That includes all your gratuitous relief?—Yes.

Does it include the Sunday wage?—Yes, the Sunday wage while it was paid.

You gave charitable relief?—Yes.

Not charged to works?—No.

I see you propose to sub-divide your Class III carriers into two grades?—Yes, so as to reward special diligence.

How came you to give special rewards among carriers?—In order to make them work up I proposed to give them a chance of getting into Grade I.

Was not it your difficulty generally to have enough diggers for carriers? You did not have more carriers than you wanted?—No.

At page 18 of your answers, the wages you work out seem below the present wages. Do you think the present wages more than they needed—that they got too much?—In the case of large families they got too much.

Your scale does not make any difference for large families?—No.

The particular feature of your scale seems to be to allow for children between 7 and 12 more than they got hitherto?—I don't think that is more than they got hitherto.

You don't think that these 12 chattacks is more than they got hitherto?—I don't think so. These are growing children and they eat almost as much as a woman. Yes, they have very good appetites.

Do you think if you gave 12 chattaks to working children, that would be very much in favour of large families?—It would not much matter if a large family has working children 7 to 12. It is the little ones below 7 that make work very expensive.

Did you feed them?—Yes, I would feed non-working children.

You propose a minimum wage. You make that out for each class. Why is that? Why do you give a Class A man a higher minimum wage than a Class D man?—I give it according to the new classification proposed. Perhaps Classes I and II should have the same minimum wage.

You would give the minimum wage when a man does not work. If a strong man refuses to work, why should you give him more?—Because he ought to get a minimum wage to keep himself alive. If refusing to work he should get the penal wage in a poor-house.

Does he want more to keep himself alive?—I went by the Government ruling.

I think the Government rule must be the same for all classes?—Yes, in the new classes the man is a digger and a woman is a carrier.

Do you think that these wages that you propose would be sufficient to cover the cost of living on Sunday?—Yes, I think so.

You might do away with the Sunday wage under that scale?—Yes.

(*President.*)—Is that what you intended or is the idea suggested to you now?—I intended that the Sunday wage should be given more as a sort of reward for good work, but not as a necessity.

(*Mr. Higham.*)—On famine relief works how are you to discriminate good work?—The only plan is, a man who does his work better than others ought to get something more than the vast majority.

If you keep a record?—We keep a record. You very soon remember people who are continually being paid the minimum wage.

That is if you can trust your subordinates?—Yes.

If you continue to pay all workers the minimum wage at this rate is it possible to enforce your tasks? These rates are very high?—Well, they are high; but you must not let labourers get weak: you must keep up their strength.

You think they should be sufficiently high to keep them from getting weak?—Yes.

Supposing he is an able-bodied worker and does not do his task. Do you still consider he ought to get enough to keep him from getting weak?—Yes, that is why I suggested a poor-house, and his getting punished.

By a poor-house you mean a kitchen?—Yes, they would not like that because they consider it a disgrace to go to what they call the "*gharib khana.*"

You did no work at all on the piece-work system?—No, not on the Ghaggar Canals.

Did you do piece-work anywhere else?—Yes, in Mozufferpur it was almost all piece-work.

You are not in favour of piece-work on relief works?—No, once there is famine I don't think there should be piece-work.

If you had had piece-work on the Ghaggar Canals, do you think there would have been many of the workers there who would have been able to earn a livelihood?—Yes, but if we had had piece-work, I don't think they would have been finished.

Why?—Because I don't think we would have had a sufficient number coming.

If they came to task-work why would not they come to piece-work?—They would come if piece-work gave them as much as task-work would.

I want to know why you think they would not come to piece-work?—All those who could earn more I suppose would come. Wherever we had scarcity I don't think ordinary contract work would have drawn. We should have had to pay much higher rates.

People in the Hissar district are well used to doing earth-work by contract in ordinary times?—Yes, some of them are.

A considerable proportion of them?—Just about the Ghaggar Canals no professional works have been done for some time; there are no roads; the roads are mere tracks.

You say Bikaniris came out 100 miles by road for work for a few months?—Yes.

Did they come out for task-work?—No, *i.e.*, not formerly.

For piece-work?—Yes.

Why do you think people about Hissar would not come for piece-work?—A fixed number came out. The number was limited. In order to get through the large quantity of work we should have required a very large number of people, and I don't think there were so many professional labourers available.

These men are always in the habit of working by bits?—Yes.

You say they would not have come?—Yes, *i.e.*, unless they had sufficient inducement.

Supposing only 3,000 came out to work and 10,000 were required, where would you have got the remaining 7,000?—You would have to give them sufficiently high rates.

(*President.*)—You would have had to give them varying rates?—Yes, varying rates according to the strength of people.

(*Mr. Holderness.*)—You mention that wages were worked out on flour and not on grain. What flour?—The flour was a mixture of jowar and gram.

What was the difference between the rate of flour and the rate of grain? Suppose flour was at 9 seers what would grain be?—About 9½; only about half a seer's difference.

Then most diggers apparently were in Class B?—Yes, Sir.

What was the task set them?—The full task, such as an able-bodied man would ordinarily do in a day.

Was it generally done?—Yes, Sir.

There was not much fining?—No.

Did you ever have to fine below minimum?—No, we never gave anyone below minimum wages.

Then carriers could not well be tasked, could they?—We gave tasks to diggers.

Therefore they were classed with reference to their physical capacity when they were put into B?—Yes, Sir.

These wage proposals of yours at page 18, clause 2, of your answers, would be really for the male digger practically?—Yes.

The wage you suggest would be a wage between the present B and C wage for males and the 10-seer rate according to the ready-reckoner. So they would get less than what you have been paying them; and similarly, Class III would be the bulk of women carriers, and they would get R0-1-6 as equivalent to the C rate for women on the 10-seer basis, and that would be less than they have been getting?—It would be the D wage for women if in Grade 2, Class III. Yes they would get less than before.

It would seem from both your proposals and cutting down one-half, that the real difficulty was, that the B wage was found a little too attractive?—Yes, too attractive.

That has been got over in other Provinces by putting the bulk of the people on the D wage?—I don't see how we could pay the D wage to a person physically fit for the B Class, *i.e.*, under the existing Code.

Do you think it attracted people who ought not to have been there?—There were a certain number who ought not to have been there.

Do you think they saved on the works?—A few of them did, principally large families.

You mention the death-rate of the people on the works which was a low one. What precautions did you take? Was the death reported to the thana?—It was reported to us by the Hospital Assistant in charge. We paid a small sum for the funeral ceremonies in each case, so it is unlikely that any deaths were not reported.

Then did you send it to the thana or did he send it?—I believe the tahsil people sent it.

Do you think the Hospital Assistant registered deaths properly?—Yes, I think so.

In paragraph 16 you say "the wage has erred on the side of liberality in the case of large families." In paragraph 20 you say the people were not too liberally treated?—On the whole I said.

Were large families the exception?—Yes, Hindus had small families and Mahommedans had large families.

Had they several wives too?—Yes, I believe so.

On page 19 you say that large families earned enough to do without the Sunday wage. Did small families only avail themselves of this permission to work on Sundays?—Yes small families. Some large families also worked on Sundays: as a rule large families worked every alternate Sunday.

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Was Sunday work general or exceptional?—Exceptional.

You mention habitual shirkers. Were they numerous?—No. Pachadas were the only class who were pretty numerous.

You had grain contractors. Was it necessary to appoint grain contractors?—Yes, latterly because we had some difficulty with local *banias*.

How did the arrangement work?—It worked all right.

(*Dr. Richardson.*)—The D wage and the minimum wage, are not they the same?—The minimum wage happens to be the same as the D Class wage, but I don't see why a person should be called D Class if he gets a minimum wage. The wage is the same.

(*President*).—I see in paragraph 23 you say you think some law is necessary to prevent the sale of inferior and damaged grain. Were there any special contractors or *banias* on the works, or could anybody come and sell?—We had special *banias* and contractors who were permitted to sell on the works, but it was not these men who sold bad grain. If they did so, we should have turned them off the works. It was in some of the adjoining villages that they tempted the people to buy by selling cheaper.

(*President.*)—You say in the case of tanks in your charge in large villages you kept off a rush of people by giving out that only a certain number would be employed. Did anybody select these people?—No, the first applicants were taken.

Did Pachada women come on the works?—Yes.

Were there any class of men who brought their women with them on the works?—Very few Vishnois. They never brought their women. One or two cases of Hindu Rajputs whose women were in *purdah*. They came themselves with their faces covered up and did work.

It is curious the Vishnois not allowing their women to come. They are a simple sort of people?—Very few of them came. I don't remember seeing more than two or three at a time.

MR. G. C. WAKEFIELD, Assistant Engineer, British Sub-division, Ghaggar Canals, called in and examined.

I put in a written statement of evidence.

Mr. G. C. Wakefield.

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Generally speaking the instructions embodied in the Punjab Famine Code have been found most comprehensive, and in my opinion little radical change is necessary. However elaborate a set of rules might be, some unforeseen situation is bound to occur which has not been provided for in the rules laid down, and which must always be dealt with by those on the spot. In consequence broad general rulings only are required, the details in the interpretation of which must always be left to local officers, if any degree of success is to be attained.

The following departures from the prescriptions of the Famine Code were made on the Ghaggar Canals in the Sirsa Tahsil of the Hissar district:—

The Sunday gratuitous wage was discontinued.

It was found that the effect of enforcing a holiday and paying wages for the same was most demoralising; the people having nothing to do got into mischief. In consequence Sunday was treated as any other day, it being left to the people themselves to work and draw wages, or take a holiday and not draw wages.

When left to themselves in this way, it was found that they took every alternate Sunday as a holiday, which necessity compelled them to spend in washing and other domestic duties. It will be asked how the people subsisted on holidays when they were not paid for them? As will be presently explained, under the system worked to on the Ghaggar Canals, the labourer who did not shirk his work, and for whom in consequence a rest was a necessity, was put in a position to earn enough during the week to be able to give himself an occasional holiday.

The next departure was in connection with wages.

It was found impossible in practice, with a staff consisting mainly of ill-educated and untrained schoolboys, to follow the elaborate calculations dealing with pies and, fractions of pies, prescribed by the Code. In consequence according to instructions laid down by Mr. Clarke, Commissioner of the Delhi Division, the nearest *pice* only was dealt with, *e.g.*, if during any week the fluctuation in the price of grain necessitated according to the Code a change in the amount of wages of less than a pice, then no change was made. And the wage of the maximum class having been fixed on these lines, the wage of each successive class was fixed at one pice less than the preceding one. For example, according to Appendix D of the Code, with a 9-seer rate the maximum wage comes to two annas four pies. Taking the nearest pice only this becomes two annas three pies for Class A, two annas for Class B, and one anna nine pies for Class C, and so on. Women to receive one pice less than the men of their class.

The next departure was in classification. The Code provides four classes, A, B, C and D. Taking it as a fundamental principle of effective famine relief that a sufficiency of work must be exacted for all relief given to those who are physically capable of work, it was found necessary to have two working classes only, a maximum and a minimum. On the institution of this system shirkers practically disappeared. The marked difference between the maximum and minimum wage acted at once as a strong inducement to earn the maximum wage by doing the full allotment of work.

The minimum wage fixed by the Code is sufficient for the maintenance of healthy life, so there is no danger of people starving under the above system. Ringing the changes on four different classes as contemplated by the Code is impracticable and demoralizing.

By earning maximum wages it also became possible for those so inclined to take a holiday when necessary for domestic purposes; their earnings for, say, six days at the maximum rate were sufficient to maintain them on the seventh day also.

It was on the inauguration of this system that the Sunday gratuitous wage previously referred to was discontinued. I was in charge of the Southern Sub-division of the Ghaggar Canals Famine Relief Works for over ten months during the past famine. The maximum number of people in my charge for one day was about twenty-one thousand. The work consisted of the earthwork of a canal and also miscellaneous work on the head-works of the canals. The system of working was as follows:—As a rule, the people came to the works in batches from the same village. They had in most instances enough money or grain with

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them to last for the next two or three days. In case they had not they were given a meal of *cooked food, not* cash. Cash was given at first, but it was found that many simply came for the initial cash payment and then moved on to the next camp to do likewise. Camps were placed at every three miles along the canal, and the numbers in each camp varied from one to nine thousand souls according to requirements of the work adjacent. On arrival, the Sub-Overseer in charge of the camp divided the new arrivals into working gangs of twelve workers, consisting as near as possible of four diggers and eight carriers. One of the men of the gang, by selection of the members of the gang themselves, was constituted a mate or headman. The gang was now made over to a writer or time-keeper, who was in charge of about twenty-five such gangs. He supplied them with tools from store and also provided the mate with a bamboo five feet long with one foot marked off with a saw-cut at one end. At the commencement of each week the tasks were fixed by the officer in charge for a digger and his two carriers, and the subordinate in charge of the camp was informed accordingly. The writer now took the new gang on to the work and showed the mate by means of the five feet bamboo the quantity of work required daily of his gang. For example take a gang of four diggers and eight carriers and a task of 100 cubic feet per digger and his two carriers, and in consequence a task for the whole gang of 400 cubic feet. The pit to be dug would be four bamboos long (20 feet) by four broad (20 feet) by one foot deep, as marked on the bamboo. Thus a tangible means of comprehending the quantity of work required of them is put into the hands of ignorant people who would not otherwise understand, and would in consequence be working without an objective which is always hopeless. The mate is now given to understand that if his gang performs the task just explained to him, they will earn *maximum* wages, say 2 annas 6 pies each digger and 2 annas 3 pies each carrier, but that in case of failure to do the allotted task they will all receive *minimum* wages only, say 1 anna 9 pies per digger and 1 anna 6 pies per carrier.

The writer now enters their names in a muster roll allowing two lines for each name, one line for a full task (F) an the other for a short task (S) as will be seen in the form given below:—

Tools. Phowras.	Tools. Baskets.	Tools. Kodals.	Tools. etc.	Names.	Description.	Dates. June. 1st.	Dates. June. 2nd.	Dates. June. 3rd.	Number of days.	Rate.	Amount.	Total amount.	Task of gang 200 cubic feet.
										R a. p.	*R a. p.*	*R a. p.*	
2	4			Nanda . .	*Mate* and Digger.	F		F	2	0 2 6	0 5 0	0 8 6	Work done and rates certified correct.
							120		1	0 1 9	0 3 6		(Sd.) Ganga Rám, Sub-Overseer.
				Marroo . .	Digger . .	F		F	2	0 2 6	0 5 0	0 8 6	
							S		1	0 1 9	0 3 6		—
				Chandi . .	Carrier . .	F		F	2	0 2 3	0 4 6	0 7 6	Checked R2-15-0 paid by me.
							S		1	0 1 6	0 3 0		(Sd.) Rám Singh, Cashier.
				Sundari . .	Do.	F		F	2	0 2 3	0 4 6	0 7 6	
							S		1	0 1 6	0 3 0		—
				Gulabi . .	Do.	F		F	2	0 2 3	0 4 6	0 7 6	Certified correct, R2-15-0 paid in my presence.
							S		1	0 1 6	0 3 0		(Sd.) Md. Bakhsh, Writer.
				Sultani . .	Do.	F		F	2	0 2 3	0 4 6	0 7 6	
							S		1	0 1 6	0 3 0		
										Grand Total .		2 15 0	

An inspection of this form will show that it is in itself as complete a history of the gang as is required for all purposes of work. It shows the tools made over to the mate, the names and descriptions of the workers, the task allotted to the gang, the result of each day's work, whether a full or short task has been done, and by glancing at the mate's column, the exact quantity also of the short task, so as to enable it to be seen at once by how much the work done was short of the allotted task and thus to determine the reason for the short work, whether the task is really too severe or whether the people are shirking.

It divides the period for which payment has to be made into full and short task days, gives the rates for each, and finally the total amount due to each labourer.

Then at time of payment, as a preventive of fraud, it fixes due responsibility on three separate individuals: The Sub-Overseer who has checked the quantities of work actually done and the rates entered, the Cashier who has checked the amounts entered and makes the actual payment, and the Writer who has prepared the roll in the first instance and certifies to its correctness and also to the fact of each individual having received the amount due in his presence.

To entirely stop peculation on famine works is a practical impossibility, but my experience has been that the greater the number of men who have to share the proceeds of a joint swindle the less chance of combination and the greater chance of detection.

In my humble opinion *no* other working form is necessary on a famine work. A multiplicity of forms to be interpreted by an absolutely untrained staff *must* result in confusion and consequent inefficiency.

As regards the forms of weekly office returns and accounts, these have already been dealt with in a note on Mr. Higham's report.

A Famine Camp.—A suitable site having been selected it was cleared and marked off into fifty feet squares.

A well, shops and latrines were provided and a pent hut of *sirkhi* (grass mat) was placed at each intersection point. Each one of these huts was occupied by five or six people belonging to one family or village. This system of hutting

was much preferred by the people to being herded together in the large huts contemplated by the Code. The risk of fire was also minimised, for if one of these small detachable *sirkhis* caught fire it could immediately be crumpled up and extinguished, whereas in the case of the big regulation huts there was one instance in which a boy was burnt to death because in his confusion he was unable to find the door leading out of the hut.

Drinking water was drawn by the people themselves from the camp well, which was frequently disinfected with permanganate of potassium.

Cases of petty theft, committed by people living in the camps themslves, became very frequent at one time. To stop this the following steps were taken and were entirely successful.

Each camp was divided into, say, eight squares, each square being marked with a numbered flag. In a camp of one thousand people there would be about eighty mates. A register was opened by the subordinate in charge of the camp and eight mates were put in charge of the eight divisions every evening, their names being entered accordingly. In the morning they reported themselves, and in case a theft had occurred, the mate in charge of the particular square was immediately sent to the officer in charge, who was a Magistrate.

With 80 mates in a camp and 8 divisions it will be seen that the same 8 men would not be on duty more than three times a month and for this extra work they were paid extra. No case of theft occurred after the institution of this system.

Regarding the degrees of success achieved with the measures employed, firstly with regard to the relief of distress and the saving of human life. All comers were immediately relieved; there were no deaths from starvation,—in fact, on the other hand, the death-rate on the works was as low as 0·29 per thousand per week.

It is a fact that many more people were relieved than it was necessary to relieve, but this will always be the case, for the practical difficulties in the way of ascertaining exactly who is in want and who is not are insuperable. The masses in India are even more inclined to act like sheep than the masses in any other country. If a majority of the inhabitants of a village go on to a famine work from necessity the remaining minority will follow them. Not because they are in need, but because owing to drought there is nothing to do at home, and they may as well go and earn some money along with the others.

In my opinion, when there is scarcity (not distress) in a district, arrangements should be made through the Public Works Department for the opening of more works under ordinary conditions. These would, to a great extent, stave off the time for the opening of regular famine relief works. When famine relief works are opened I think they should be concentrated as much as possible and no village works commenced at the same time.

The covering of a distance by a native for the purpose of obtaining employment has been from earliest times a recognised sign of want, and those really in need will travel long distances. "Necessity knows no law," and if the nearest place where relief is to be obtained is 20 miles off, those really in want will go and live there at once and those not in want will be prevented from going because of the distance to be travelled.

A village work is no test of necessity. The people will work there simply because there is nothing to occupy them at home. Village works should not be opened until such time when the famine is nearly over, and it is desirable to get the population back again in the vicinity of their homes for the purposes of husbandry. As far as possible residence on the works was encouraged, and, with the exception of inhabitants of villages within a radius of three miles, all lived on the works. No deductions were made for distance travelled daily, because wages were made dependant on the quantity of work done and not on the number of hours worked, nor do I think it possible that such a deduction could be made with any degree of accuracy when dealing with such hosts of people.

The cost of hutting accommodation per worker was 1·2 pies. The cold did not affect the health of the people, as there was abundant firewood obtainable. Bedding was not provided, generally speaking, as practically all had old but serviceable wraps. I am not in a position to say whether the proportion of dependants and non-working children was larger when the works were small and numerous than when they were large and few, because I had only large works to deal with, but one fact was very noticeable in connection with non-working children and dependants; they were much more numerous when the work was situated within reasonable distance of a town or large village; the larger the habitation near by the more numerous the non-working children and dependants on the works. Also the number of non-working children and dependants diminished greatly when cooked food was substituted for a cash dole. I would advocate that relief of non-working children and dependants should invariably be by means of cooked food only.

The effect of a cash dole is demoralizing, and results immediately, not only in the production of children borrowed from parents not themselves on the works, but also in fraud by the staff for whom it is possible to enter more non-working children and dependants than really exist, because they have not to produce a proportionate outturn of work for these.

On the question of "Task-work" and "Piece-work" I have already recorded my views in a note on Mr. Higham's report; also regarding the matters embraced by questions 84 to 113.

I would advocate the execution of all major relief works by officers of the Public Works Department on the following grounds: Famine works require primarily a knowledge of the control of large numbers of labourers; they also require a knowledge of engineering and of accounts. These necessary qualifications are a part of the daily work of an officer of the Public Works Department, and he is in consequence the best man for the work.

But having been selected for the work he must in no way be hampered by the establishment of a dual control. His authority must be supreme on his works, and any other official sent to the works must be sent under his orders and only for the purpose of rendering him help when ordered to do so.

The Collector of the district must, as a matter of course, *ex-officio*, exercise a general control, but ought not to delegate his authority to junior inexperienced assistants.

Assuming that the services of all available Public Works subordinates are required for setting out and supervising the work, I think that senior Naib-Tahsildars might be tried as subordinates in charge of the organisation of relief camps. But this is only on the assumption that the supply of Public Works subordinates is not equal to the demand.

I would prefer experienced Public Works subordinates to be in charge of camps, firstly, because they would be conversant with Public Works methods, and, secondly, because the man who sets out a work and has a practical knowledge of it also knows its requirements best, and can place his labour accordingly. With Naib-Tahsildar in charge the Public Works subordinates would still have to be held responsible for the correct and economical execution of work, but would have to indent on the Náib-Táhsildár in charge for his labour, etc. A dual responsibility would thus be established which is the one thing above all others to be avoided.

In any case, whoever the subordinates in charge of camps, they *must* be absolutely under the orders of the officer in charge. Otherwise he could not possibly be held responsible for the success of the undertaking. I would put everything into his hands or nothing. He should have the control of payments, conservancy, bazars, kitchens, in fact everything. Naib-Tahsildars if available could be employed with advantage for these matters, but always under the orders of the officer in charge. He should also hold magisterial powers; third class powers would suffice. This is very necessary to enable him to exercise efficient control. All cases of crime occurring on his works should be dealt with by him alone. Although it may not be necessary for him to exercise his powers, the mere knowledge of their existence would go a long way towards preventing the occurrence of crime.

With reference to Part V of the questions, I have already answered those with which I am concerned in a note on Mr. Highman's report.

The officers of the Rewari-Ferozepore Railway, which runs through the Hissar district, complained that they were unable, during the famine, to secure labour under ordinary conditions. The complaints were well founded, but nothing could be done to help them because of the following reasons. On famine works the people were paid twice a week, and also all the members of a family were employed, whilst on the Railway the men only were required, and in the majority of instances on monthly wages only.

So long as all the members of a family are paid on famine works (and this is the only certain method of relieving distress), I do not think those in real want will labour in a place where this is not the case. But in a town or village, for instance, the inhabitants will rather stay there and earn less than go to a distant famine work to earn more. Government relief measures were to some extent materially

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assisted by the employment of a certain amount of labour by private individuals. *Banias* took advantage of the low rate of labour to build houses and do other things for themselves, but this they did entirely for self benefit and not with any philanthropic ideas of relieving distress. I had no connection with the distribution of gratuitous relief to the people in their homes; this was undertaken by the Civil District authorities, but I think the most effective method of relieving the incapable poor would be to make their relatives bring them on to famine works. The system of house-to-house relief when not absolutely necessary, as in the case of *parda nashin* women, is not desirable. There is a danger of many not being relieved at all, and there cannot be any close supervision of the work of subordinates employed in the actual distribution of relief. Relief kitchens I consider should be opened simultaneously with every famine work for the feeding of non-working children and dependants, who should never be paid in cash for reasons stated before. I do not think kitchens would be of any good except on famine works. For instance, if situated in a city, they would be resorted to by professional beggars not in need, simply, as before stated, because there would be no distance to be travelled. On the Ghaggar Canals relief works I noticed particularly that none of the familiar professional beggars belonging to the city of Sirsa, which was not very far away, ever came on to the relief works, proving conclusively to my mind the necessity for a distance test. If these men who were professional beggars would not travel 10 or 11 miles, thereby showing they were not in real distress, how much more would this test apply to the ordinary cultivating classes?

The kitchens on the Ghaggar Canals were worked by Naib-Tahsildars under the Civil authorities, and on the whole worked well. When kitchens became numerous I think supervision of the working staff of each kitchen and prevention of misapplication of the food did become difficult, but this would I think be remedied if the officer in charge of the relief works had also had the control of kitchens. The mere fact of his always being *en evidence* would have acted as a wholesome check. The mortality on famine works as stated before was exceptionally low. I consider the rate of wages paid to workers and the diet supplied in kitchens to have been sufficient. Certain alterations in this respect were proposed by me in a note on Mr. Higham's report. There were no deaths from starvation on my works. The supply of medical subordinates and medicines was adequate.

Famine relief operations in the Hissar district were commenced in good time, the population being relieved when there was scarcity only and before the occurrence of distress. The results have been satisfactory both from humanitarian and economical points of view, and the people on the whole are grateful for all that was done for them.

In conclusion I would record, for what it is worth, a suggestion for the prevention to a great extent of famine.

At present the Indian cultivator, with his hereditary belief in fate, pays no heed for the morrow. When he has a bumper crop he retains only so much of it as will feed him and his family until the next crop is in, and sells the rest to export merchants, both European and Native, and squanders the money realised in marriages, etc. If the next crop fails he is at once placed *hors de combat*, most of the grain has been exported from the country, and what remains is in the hands of *banias*, who will not part with it until a maximum price has been reached when distress is at its height. The cultivator is thus, by his own want of forethought, placed entirely at the mercy of the *bania*, and the *bania* has no mercy.

I would suggest a system of village granaries. In times of plenty, each cultivator to be compelled to deposit enough grain to maintain himself and his family for a year. I have only heard two objections advanced against this theory. One that it would be an interference with the liberty of the subject and with private enterprise, and the other that the storing of large quantities of grain liable to deteriorate would be too costly an undertaking.

In dealing with the first of these, if the liberty of the subject tends to his committing suicide, it is not against civilised laws to prevent him from doing so, and I would argue that this is a similar case, for by deliberately not making any provision for the morrow, the cultivator does nothing short of arranging for his own death. Again, as regards interference with "private enterprise," or in other words the *bania*, it is not easy to understand why this false sentiment should be indulged in. Taking it as a maxim that the greatest good of the greatest number is desired, it is difficult to understand why the *bania* in the minority, is fostered at the expense of the rayyat in the majority. The *bania* will trade only where the best prices are obtainable, and unfortunately for the country this means the export of the bulk of its produce to European markets.

The next objection is against the storing of the grain. The objection appears to lie principally against storing it any length of time for fear of deterioration, but it would not be necessary to store it for longer than six months, the period between the two yearly crops when the old store would be sold and new grain stored in its place.

I have talked to leading village headmen in two or three districts about this question, and they have all said that once the matter was started there would be no difficulty in storing. A certain amount of grain is stored as it is by each household, and it would only mean the storing of the extra quantity in the same manner.

The Lambardars of a village would be held responsible that each household maintained its store, and a Government Inspector in each district could check the statements of Lambardars by going to villages and checking the store of half a dozen households selected haphazard. I have talked to cultivators themselves about this matter and they had one objection only to advance, which was that when selling off the old store to substitute new, if the price of grain was lower than when they stored what they were now going to sell, they would lose by the transaction. This would occur of course, but then *vice versâ* they would gain also, and even if they lost a little on the whole, the amount lost would simply be a premium paid towards an insurance against the risk of famine.

(*President.*)—When were you appointed to be Assistant Engineer on the Ghaggar Canal?—In December 1896.

Just when work was begun?—Yes.

Did you continue with it till the end?—Yes, I am still there.

(*Mr. Higham.*)—Do you think the Sunday wage, so long as it lasted, was very demoralizing?—Yes, because it left the people with nothing to do.

Do you think one day off in the week is demoralizing?—Yes, when people are herded together in large numbers. When left to themselves we found that they took every alternate Sunday as a holiday.

(*Mr. Holderness.*)—That would reduce the number of idlers by half on Sundays?—Yes, they used to go across to other works on Sundays when they were paid a gratuitous wage.

Were people taken on Sundays on the works?—Yes, the works were open every day in the week.

Of course all your workers or the majority of them were all resident on the works?—Yes, they had no homes to go to, except perhaps to the neighbouring villages.

Do you think when they have not got their villages near the best thing is to keep them employed?—Yes.

I understand the system you adopted in tasking the men was practically to put everybody into Class B?—There was no initial classification—I mean to say on the physical appearance of the people.

You put them all into Class B?—Yes, but that was only to comply with the provisions of the Code. We only had two wages, the maximum and the minimum, which depended on the outturn.

Then you put everybody into Class A if they did their work?—Yes.

Then were they supposed to do an A task?—Yes, to get an A wage.

Was the A task as difficult as the task that can be performed by a professional labourer?—Yes, but we did not put it at that. We had it lower about 15 per cent.

Although a man did a lower task than a professional labourer, he got the full wage?—Yes, this with the object of inducing the people to do good work.

So what practically happened was that you gave the people in B Class an A wage if they did their task?—Yes.

If they failed to do it, you put them straight down to the minimum?—Yes.

Did you allow any margin?—No, none.

What was your minimum wage?—It fluctuated.

Did it correspond with the D wage of the Code?—Yes.

You never went below that?—No.

Supposing there was any contumacious refusal to work, did you go below the D wage?—We had no such case.

I suppose the result of this system was that all your feeble families were expected to do the B task and could not do it, and if not, would get the minimum wage?—As a rule we had no weakly families: that is, what the Code describes as weakly. They were all pretty well able to do the work.

Do you think you might have done away with the minimum wage altogether?—No, I don't think it would be fair. A man may not be able to do his full task. What I mean is, the illness of a member of the family or anything of that sort might interfere. Say 85 cubic feet was the task and they did 20 only, they still got the minimum wage.

(*President.*)—Did they practically ever do 20?—It did happen so sometimes, but instances were few and far between.

Were they ever contumacious, do you think?—I don't think so. No, we never came across contumacy. They act like sheep and follow each other. It does not pay a man to be contumacious, he suffers.

(*Mr. Higham.*)—What number did your working party consist of?—About 12. We made payments on the work of each party.

Did you find any difficulties in having a small party like that?—No, very much the other way. The great thing was to keep members of families together if possible.

How many members did you generally get from one family?—Six, but they had their *bhai baradari*.

You think that where there is scarcity the carrying out of works, under the Public Works Department conditions, would do a great deal to meet the demand for labour?—Yes.

Do you think you might have carried out the Ghaggar Canals under the Public Works Department conditions?—For a certain time. When I first went there, but not for very long.

Then intermediately between the Departmental system and your Code system there is one of paying by results. That is, to say, having no minimum wage at all?—I think the piece-work system a most excellent thing if you have time to see that individuals are not cheated, *i.e.*, at the beginning of a famine.

You mean to say that it is an advantage to pay every individual?—Yes, the people themselves prefer it.

Do you think relief works take men away from Railway works?—No, not to any extent.

Did you have any complaints from Railway officers?—Yes.

How many workers had you on these works you have been referring to?—About 20,000.

I cannot reconcile your statement that they were all put in A Class with the returns. The returns show any number of people in B Class when the works first started?—They were all entered in B, but all these returns are simply nominal to comply with the Code.

They don't show payments?—They do show payments, but that also was in compliance with the Code.

I suppose the number you have given were not all workers?—Twenty thousand souls, not workers.

In payments you really did not follow this classification of your works?—No.

Had carriers a full day's work?—Yes, certainly.

Sometimes it has been thought that carriers have been in excess?—No, ours were not in excess of requirements.

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How do the present wages compare with the ordinary wage before the famine broke out? Were wages the same or lower during the famine?—The ordinary wage of a digger was 4 annas before the famine, you can get labour now at 2 annas or 2 annas 3 pies per man. During the famine the wages were practically the same as they are at present.

You mention at page 27 that "the effect of a cash dole is demoralizing and results immediately, not only in the production of children borrowed from parents not themselves on the works, but also in fraud by the staff," etc. Did both these things actually happen?—Yes, sometimes keepers were imprisoned for fraud.

The borrowing of children from parents, was that frequent?—Yes. On every work situated near a large centre there were immense numbers of non-working children on the works because they simply came from the city. There was no great distance to cover.

Do you consider the maximum and minimum wages paid to workers sufficient?—I think the minimum wage is quite sufficient for an ordinary person. An ordinary Jat cultivator would not eat more than that.

You gave nothing besides grain in the minimum wage?—No.

Your idea is that people ought to keep a year's store in hand?—Yes.

(*Dr. Richardson.*)—Had you any epidemic sickness on your works?—No, except towards the latter part, when there was diarrhœa amongst infants.

You say that "drinking water was drawn by the people themselves from the camp well, which was frequently disinfected with permanganate of potassium." Did you give credit to that process for any part of the prevention of sickness?—I think so. The people were greatly struck with it themselves. They had no objection to it. I have no doubt in my mind of its good effects. There was no outbreak of sickness.

(*Mr. Bose.*)—As regards your proposal for compulsory storage of grain as an insurance against famine, how would you prevent the grain stored from being seized for debt?—I would make it absolutely non-attachable. I would make the Lambardar of the village responsible that each person in the village had that store, and if a creditor came to take it away, the villager would go to the Lambardar and complain, and Government would have it stopped.

Whose duty should it be to store the grain, the person who actually raised it, or the tenant or the proprietor of the land, for in many cases they may be different persons?—I would make every tenant store a sufficiency of grain irrespective of his class; every person holding land; every person liable to famine; every inhabitant of a village, but not the daily labourer.

How would you settle the question of proprietorship of the stored grain?—The system could not possibly work unless there were legislation for it.

(*Dr. Richardson.*)—Would it not be the same thing if you sold the grain and kept the money?—Not at all, sir, because they would spend the money on marriages, and even if they kept the money, there would be insufficient grain in the country due to heavy exportation.

MR. KIRTHEE SINGH, District Judge, Jhelum, called in and examined.

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I put in a written statement of evidence.

1. I am an Officiating Extra Assistant Commissioner in the Punjab Provincial Service. I was in charge of the famine works in the Gujarat district from the month of August 1896 to nearly the close of January 1897.

2. The first period was that of road-making, and the second the Jhelum Canal work. When the first sod of the Jhelum Canal was turned there were, including non-working children and those on gratuitous relief, 24,000 odd people on the works. The maximum was reached during the time that Captain Douglas was Famine Officer, and the numbers were 50,691, the remarkable feature being the increase in the number of non-working children.

3. So far as my experience goes, the prescriptions of the Punjab Famine Code were not materially departed from. The history of the operations shows only a more or less strict adherence to the letter of the rules laid down.

There cannot be the slightest doubt that the timely opening of relief works by Government and the liberal grants of *takavi* for the purchase of seed and cattle prevented great distress in the Phalia Tahsil. Not only have the people thus been saved from the extreme of physical distress, but their property has been saved from the hands of the money-lender. The action of the Government in my opinion has been an object lesson even to the poorest and lowest of the practical benevolence of Government, and I think the people are truly grateful.

4. No cases occurred in the distressed tract in which it can with certainty be said that death was due to starvation, though undoubtedly there were cases of emaciation, chiefly among the children and the very aged. On the works the health of the people was excellent. With regard to the second point raised, it has been found that economy in working is a function of the strength of the supervising staff, and they vary together. This explains the heavy expenditure during the months of December and January.

The efforts made to find the best method of extracting a fair amount of labour from the enormous numbers who flocked to the Jhelum Canal Works being tentative were not

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at first completely successful, but taking the famine works from start to close, I do not think it can fairly be said that the expenditure has been wasteful.

5. On the question of advice as to future methods, from my junior position in the service I do not venture to say much.

I would suggest—

(*a*) That in all tracts classed as insecure the number of rain-gauge stations should be increased. Except for the initial expense there is no reason why every village school should not have one.

(*b*) Owing to the intimate knowledge and the close and in general friendly relations which the Revenue Officers have with the people, I am of opinion that famine relief works should be carried out by Civil officers.

(*c*) In the case of a large work the officer in charge, whether a Civil officer or an Executive Engineer, should be given the powers of a Deputy Commissioner under the Code.

There are minor points in the Code which might be noticed as requiring amendment, but I think it unnecessary to notice these here.

(*President*).—When did you become District Judge of Jhelum?—Shortly after I left the famine works.

Before the famine works began where were you?—I was then Revenue Officer in the Phalia Tahsil, which forms part of the Gujarat district.

What do you think was the cause of the peculiar distress in Phalia?—The portion that was distressed is that small portion of high land lying between the Chenab and Jhelum and which is bounded on the north and south by a level strip of land varying from 5 to 8 miles in width. The rainfall appears where it strikes the Pabbi Range, which takes off gradually. The water then collects below the line of the river, and while watering the bed, leaves the high lands entirely without rain. The rainfall is precarious. That is shown by the history of the last *harvests*. We took 14 harvests: of these 7 were average harvests, 2 bumper harvests, and the other 5 very much below average; so much so that in 1892 the whole of the *rabi* revenue for this tract had to be suspended. The bad on the whole predominated, and it was found necessary to suspend "again" as in the *rabi* of 1892.

This tahsil was re-assessed not very long ago?—Yes, that was just before the re-assessment.

Was there a large increase?—No, if you take incidence on the land. Well, people as a general rule have made their livelihood by selling *ghi* and milk from their cattle. In 1895 rinderpest broke out, and in this tract alone over 6,000 head of cattle were destroyed by rinderpest. Previous to this plough animals were weakened by the foot and mouth disease which, however, did not cause much mortality. Altogether as far as one's estimate went about 10 per cent. of the total number of cattle in this tahsil were lost. At the same time the rainfall failed, and the rainfall was only one-tenth in January and about three-tenths in February, and I think two-tenths in March, but at any rate it was quite insufficient, and it did not avail for the whole tahsil. Then to help the zemindars Government advanced money for cattle. They advanced in *this* tahsil alone over ₹30,000, and they suspended ₹32,000 of revenue.

That was in the *rabi* of 1896?—Yes. Then, as it was found that the rains did not come, the Commissioner gave orders that test-works should be started in the Phalia Tahsil, and they were started in June and regular works were opened in August, and I was put in charge of them then. The people had no doubt been to a certain extent impoverished by bad harvests and the loss of their cattle, and they were not able to stand the probability of another bad harvest like the *kharif*, so that in the opinion of the Commissioner, in which Government agreed, it was thought best to take measures to prevent their becoming weak entirely or becoming permanently impoverished.

The works were carried on strictly on the Code system?—Yes. The Code wage is a very liberal wage, but for a single individual I don't think it is too liberal.

Supposing a family consisted of five or six persons?—Then one finds he probably gets very much more than a Munshi does. I am talking of the A wage.

What do you think of the minimum wage? It is barely sufficient to keep life or do you think it is more?—I think it is certainly sufficient to maintain life, and also it does not act as a deterrent. People do not like the poor-house. On every large work there ought to be a poor-house.

How would you get people into the poor-house?—There will be no difficulty in getting people to go. When I had 24,000 people on the works I had only two policemen. The question is one of personal influence.

What did you do in cases in which people shirked work?—There were cases certainly in which they preferred to sit and smoke the *hooka* till you came round. I think the Code is weak in that it is difficult to make them work. You can adopt measures, but not according to the Code.

You have heard what Mr. Wakefield said. His system was to have two rates, the A rate and the D rate, and to trust to the great difference of these two rates acting as a spirit, and he says that practically the people did prefer to do a little work and get the A rate rather than to be idle and get nothing but D. There is much to be said in favour of this?—I think the Code system is best, except with regard to the D Class. I think the D Class ought to be sent over to the poor-house, or to have a special place for themselves, because they are a nuisance on the works.

You are talking now, in using the word D Class, of weakly people?—They ought to be classed as dependants because they do very little work.

You would not take on idle people who decline to work steadily and are paid the D wage?—No people classed as D. They ought to be turned off the work, and if strong again, they ought to be put to work—otherwise the poor-house.

Do not these men come in as carriers in family gangs?—Very little. If you did all the work for him no doubt. He himself did very little. With that exception the A, B and C classification is good. The only difficulty is to prevent B and C being classed into A when the new *goshwara* is written.

What work was going on while you were on famine duty?—In August we began with road work and raising roads in the Phalia Tahsil. Then on the 25th December works on the canal opened. At the end of January Captain Douglas took over charge.

Road work was not very useful work?—There was one road I think was a very useful road, but others were not very useful. The reason why road work was adopted was that there were very few places suitable for tanks, and three spots which were found suitable for tanks were all in Government rakhs and distant from villages.

(*Mr. Holderness.*)—When you fixed your famine wage what was the staple grain?—At first wheat.

Why did you take wheat?—Because at that time there was no other grain to be had there. Then gram came in, but it made no difference in the price.

In what class did you put the bulk of your labourers?—The bulk of them were *Musalis*, men who live by digging. They were classed as A and all zamindars as B. Then afterwards a slight change was made and men were promoted from B to A as they were able to do more work.

Who fixed the task?—On the roads I fixed the task.

Was the task a hard one?—The way I fixed it was this. It may not be considered very right, but I got 80 per cent. of the work that I wanted out of them. I gave them a very much higher task than I expected to get. I gave to women 75 per cent. of what men got. A man's task was fixed at 100 cubic feet. That was a digger's task. The men had to dig for their women and adult children. We certainly got a reasonable outturn.

What, does that show that your task was *light*?—Yes.

Did the Public Works officers say that this task was too light?—No, I think they approved.

Did they approve of the classification?—No. The Commissioner objected. He thought zamindars ought also to be put into the A Class. That was arranged afterwards by allowing them to remain in B Class for some time.

How did you class children over 12? Were they adults?—Not adults of their own class. Supposing there was an A child he was classed as an adult of B or C Class according to his strength, and the work of that class was taken from him.

I see you had the class selection system. Was that in your time?—That began in my time. Generally the system was that each family worked together, and as far as possible, the same village worked in one section, *i.e.*, in a section of 800 feet.

It is said that zamindars refused to work with village menials, and they were given separate work?—No, that was the Commissioner's suggestion that they should be segregated

and separated, the zamindars in one section and the *Musalis* in another. It was thought that the zamindars were the cause of the small outturn.

Apparently the *Musalis* earned very large sums?—Yes, they had abnormal families.

It is stated that if people had not the power of alienating land, relief would have been very much more extensive. What is your opinion?—There is not the slighest doubt about that. It would tell in many ways against the people if that power was withdrawn; and it would lead to serious fiscal difficulties.

Was very much borrowed in your district in consequence of the famine?—If you take the three previous years when works were started, and take the whole period of the last Settlement, as far as I remember the figures, the alienations amount to about 40 per cent. of the whole period previous to this present Settlement, and there is not the slightest doubt it is these bad years that have told on the people, and they have had to alienate their lands—though the liberality of Government in the matter of loans and suspensions has done much to lighten the burdens of the zamindar.

What were the difficulties in working the Code?—The first point—as every famine officer is aware—he has the right to refuse admission to anybody to work. But how can he tell whether a man is a *bonâ fide* applicant for work or not until he tries him, because there is not the slightest doubt some of the men who came from villages close by could have got on without coming to the works.

Mr. Kirthee Singh.

4th April 1898.

Apart from the weaklies do you consider the D wage a sufficient wage for those who have to work?—Not if the D wage is calculated on the cheapest cereals: if it is calculated in wheat, then it is sufficient, because they will buy the cheaper grains. If it is calculated in barley and bajra, then I think it is not a sufficient wage.

Were there any workers employed either as diggers or carriers who simply sat on the ground and did nothing?—We turned the D Class out and made them break clods.

Would they not have got less if they had been classed as dependants?—Not if classed as dependants.

Do you think the work was too much for the Civil officer, or do you think there should have been a Public Works officer on the works?—When one takes into consideration the kind of work which a famine coolie can do, I think the Civil officer, provided he be of sufficient standing, is quite as competent as a Public Works officer to carry out all works, and it is an advantage in this way that the Civil officer is much more closely in touch with the people than a Public Works officer. In consequence of his training a Civil officer's attention is in the main directed to the people—that of the Public Works officer to the work. Both are equally humane, but the attitude of the Civil officer is I submit to be desiderated in all famine work.

Do these remarks apply to the Jhelum Canal?—Certainly.

At the Lawrence Hall, Lahore.

FORTY-NINTH DAY.

Tuesday, 5th April 1898.

PRESENT:

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (PRESIDENT.)

SURGEON-COLONEL J. RICHARDSON.
MR. T. W. HOLDERNESS, C.S.I.
MR. T. HIGHAM, C.I.E.
RAI BAHADUR B. K. BOSE, C.I.E.
MR. M. W. FENTON (*Temporary Member for the Punjab*).
MR. H. J. MCINTOSH, *Secretary*.

MR. R. CLARKE, Commissioner and Superintendent, Delhi Division, called in and examined.

I put in a written statement of evidence.

Departures from the prescriptions of the Famine Code.

1. After a little experience had been gained, and it appeared that the wages calculated according to Appendix D were unnecessarily liberal, the classification was revised, and on most works the North-West system of diggers and carriers was introduced. In some places the Sunday wage was disallowed as unnecessary. In neither case did any untoward results ensue.

2. In this Division the provisions of the Code regarding the respective functions of the Collector and other civil employés, and the officers of the Department of Public Works, were maintained, although it might be supposed, from paragraph 9 of Mr. Higham's note on the Punjab, that this was not the case.

Degree of success.

No deaths directly attributable to starvation were reported, nor was any peculation of any importance discovered. Aimless wandering—a feature of all previous famines—was quite unknown. Works of great public utility were constructed at little above ordinary rates, and hundreds of village tanks, upon which men and cattle depend entirely for water in Hissar and Rohtak, were excavated. Revenue was freely suspended and *takavi* granted on a scale never before seen; while 2½ lakhs of rupees were distributed from the charitable fund to persons who were not eligible for Government loans.

As regards economy, Mr. Higham's note, paragraph 7, shows that the rate per 1,000 feet was "not excessive," considering the conditions, and paragraph 8 shows that, for the other larger works, the outturn was good and the cost per 1,000 feet "but little above the normal rate."

Advice as to future measures and methods.

Mr. R. Clarke.

5th April 1898.

Piece-work should not be absolutely prohibited as it is. It would be very useful at certain stages of all famines and in certain localities, where women of certain classes do not appear in public and certainly would not go on to relief works. I am thinking principally of the Rangars or Musalman Rajputs. Simplify the classification as recommended by Mr. Higham. Give more time for submitting returns, and cut out all information from the returns that has been found to be superfluous.

The scale of wages is unnecessarily liberal when calculated according to Apppendix D of the Code. Fifty per cent. instead of 75 added on to the cost of that part of the ration which consists of grain, is quite sufficient if a Sunday wage is given, or if people are allowed to earn an equivalent by extra work on ordinary days, which is what I would prefer.

More attention is required to the selection of works for inclusion in programmes.

Other recommendations and opinions.

Question 208.—Effective measures have not been taken to ensure that relief reaches the tenant. Section 30 of the Punjab Land Revenue Act provides that if land revenue is remitted or suspended, a Revenue Officer may, by order, extend the relief to the rent-payer. Where the land belongs to a rich man and is encumbered with occupancy rights, the occurrence of a famine gives him an excellent opportunity of breaking the tenant right. All he has got to do is to pay in his revenue early and decline suspension, which is not likely to be forced on him, and then bring suits against the occupancy tenants for rent they cannot pay.

This was tried in Hissar, where there are many large *malguzars*, and was only defeated by the Deputy Commis-

Mr. R. Clarke.

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sioner (Captain Dunlop-Smith) warning the Revenue Courts to give long grace in the decree and to refuse costs.

In one batch of cases that came before me in appeal, the tenants had paid a heavy fine (some thousands of rupees) for the grant of occupancy right in years gone by. They were tenants on contract, but the contract contained a clause that, if the rent reserved was not paid by a fixed date in each year, occupancy rights should lapse. The landlord tried to enforce the clause, but as it appeared that the revenue had been suspended, I, by order under section 30, suspended the rent.

Where a widespread failure of crops has taken place, Revenue Courts should have legal power to refuse decrees for immediate payment of rent whether the revenue has been supended or not, or it might be provided that rents should be suspended where necessary, such suspension to carry with it a corresponding suspension of revenue or refund, if paid.

I attach importance to this point, as a new system of revenue collection has been introduced into the Punjab, called the "discriminating system," under which, whenever revenue is suspended, those individual land-owners who can afford to pay are excluded from the concession. Now these are the very men who have got tenants whom they can squeeze—squeeze out of their holdings perhaps—and the Revenue Law will not help the tenants as the landlord's revenue has not been "suspended." I consider the new system objectionable or inexpedient on other grounds, but in its possible operation in respect to tenants it may be worth the notice of the Famine Commission.

(*President.*)—You were Commissioner and Superintendent of the Delhi Division throughout the scarcity?—Yes, Sir.

(*Mr. Higham.*)—In paragraph 1 of your note you say that on most works the North-West system of diggers and carriers was introduced?—I think there is a difference. In the North-West system carriers were all put on the D or minimum wage and diggers received the B wage.

But as far as I understand from the witnesses we had yesterday you only put people on to the D Class who were practically unable to do any work at all. People who carried were put into the B Class?—That was not my impression. I don't think that that was so. I think they were paid the minimum wage.

Where are you thinking of in particular?—I am thinking of the Rohtak and Karnal districts and Hissar, except perhaps some of the larger works — the Ghaggar Canals. I believe on the Ghaggar Canals it is quite true that people were paid according to the outturn more or less.

Did carriers only receive the minimum wage?—That was the impression I had from reading the returns that came in.

Do you think that the minimum wage is sufficient for those who are not able to dig, *i.e.*, for weak people who come to the works?—I do.

That is to say the wage being 14 chattaks for a man and 13 for a woman?—If calculated on a flour basis, it is distinctly sufficient.

Equivalents are calculated on grain. How would you calculate them?—They were calculated on flour. Twelve chattaks was flour and 75 added to that made 21 for A Class.

Do you think flour or jowar should be taken?—You can take whichever you like, but you must regulate what proportion you will add.

Do you agree with the proposals I made with reference to wages?—Entirely.

Which was that they should get 13 chattacks?—I do.

I meant grain, but I don't know why you should take flour?—I proposed a 12-chattack flour basis, which is just the same thing.

Do you think that people received more than a subsistence allowance all through the famine? Do you think workers saved money?—I think that people who had large families did very well.

I suppose you could not suggest anything for reducing large families?—Except fixing some limit on the number of dependants.

In some districts of the Delhi Division the Deputy Commissioner did try measures of that kind?—He made enquiries as to who dependants were, and women were not allowed to go without their husbands, and other plans, but they were not satisfactory.

Do you think that there was any practical way of limiting the number of dependants beyond enquiring into particular cases?—I think kitchens might do very well if started simultaneously with the work.

If you had kitchens, you would put no limit, but let men, women and children come as they like?—I think so, yes.

Would you enquire whether they were the children of workers?—This could not be done, as they come from great distances.

Do you suppose that people would bring children of other families with them from great distances?—I think it is not impossible.

I suppose if the parents of these children sent them all that distance they would not have done so unless they were hard up?—No, they would not. They were hard up.

You would accept all children provided you gave them food instead of relief?—Yes, if we had kitchens.

Should they be thrown open to all children that might come?—Yes.

Would you do away with cash payments to children?—You could not do away with that altogether. You could only manage kitchens on larger works.

I suppose kitchens might be managed by officers in charge of works, or do you think it necessary they should be under the Civil officer?—They could be managed by officers in charge of works, but it is not desirable that they should have extra work thrown on them. There always is a Civil officer as a rule deputed to assist the officer in charge on larger works.

Do you think that necessary or desirable?—He was found very useful—a man of the Naib-Tahsildar class.

A sort of Paymaster: in some cases he supervised payments?—He was supposed to look after payments, check them; but did not actually pay except in rare instances.

Do you think there should always be an officer of that kind made responsible for kitchens?—Yes, unless the officer in charge preferred to do it himself.

On very small works where you could not have kitchens you would still propose to give gratuitous relief to dependants?—I think it would be necessary.

These small works would, I suppose, be in the neighbourhood of villages—probably village tanks?—Very often.

Do you think that there should be any difference in the wages paid to workers who leave their homes and go a long way to the big works, and to those who are employed on village tanks or village works? Do you think there should also be a lower rate of remuneration in the one case than the other?—I don't see what is the objection to it. I have not thought over it. As a matter of fact wages were much lower on village tanks than larger works. They were fixed by the Deputy Commissioner, not rigidly in accordance with Code rules, but whatever he thought was necessary.

It has been represented by several that on works carried on in villages people have many little comforts and odd ways of picking up things that they do not have when they go away great distances, and that they could be maintained on a lower rate of wage?—No doubt about it; quite so.

Do you think that piece-work could have been carried on, more extensively than it was, with advantage throughout the whole period of the operations?—I think it might have been with advantage certainly. I don't think it would have been sufficient of itself.

You mean to say some would not earn enough at piece-work?—Yes.

Would you favour an attempt to run the two concurrently?—Yes.

You would have piece-work for the able-bodied and reserve task-work on the minimum wage for the weak?—I see no objection to that. That would be well worth trying.

The only instance of piece-work I understand was in the Karnal district?—Yes, for Rangars.

Those who were not Rangars, did they work on task-work or piece-work?—It was only sanctioned for Rangars. The two systems were intended to run side by side.

I suppose in the case of Rangars, class work is really the only system?—Their women will not come to work under any system.

In the task system they can only earn a wage for themselves?—That is true.

The programme of works that you had before the famine began, was that considered suitable?—It was in a very backward condition except in one or two districts, and there was a great deal of trouble in getting work out. We had to make revised programmes, and in several districts what we

passed as sufficient in former days had to be struck out. For instance, bunds on rivers in the Umballa district.

Were programmes supposed to be revised annually?—They were, yes; but it was done in a rather perfunctory manner.

Were Superintending Engineers ever concerned in drawing up programmes, or were they drawn up by Commissioners?—They were drawn up, I think, by the Deputy Commissioner and Commissioner. The Superintending Engineer saw them. Unless he was asked for his advice he was not responsible. When famine became imminent, of course he was freely consulted.

Do you think that all the works carried out in your Division were works that will be very profitable?—All the larger works, except the Bir Ditch.

The danger of that is that it will fill up?—That is a small matter.

How is the Ghaggar Canal doing now? Is it doing any good?—I have not seen any report of its operations for last year, but it is bound to do good.

They have done some irrigation work there?—Yes, close on 20,000 acres.

Was the work appreciated by the people?—Some large proprietors did not like it. As a matter of fact, they have a splendid crop this year and have nothing to grumble about. They do not like to see the river interfered with.

Do you approve of the policy of digging tanks in villages?—I do. There is nothing more useful than a tank. I am thinking more of Hissar, where villages cannot get on without tanks.

In Karnal?—There were very few tanks excavated. I should think tanks would not be very much required in Karnal. As a matter of fact, none were dug there. No, I cannot think of any.

(*Mr. Holderness.*)—I suppose famine in the Hissar district was different from scarcity in other districts?—Quite.

The numbers on relief were not too large?—I don't think so.

That included some immigrants from foreign States?—A great many from Bikanir.

You have seen what Captain Dunlop-Smith has written about tanks. Do you agree with him?—I entirely agree with him.

The policy of the Deputy Commissioner of Umballa is to reserve tanks for zamindars and to send labourers to the roads. Do you think that is desirable, or if desirable, is it practicable?—I think it is quite practicable.

If you had class works going and you told the agricultural labourer that tanks were not for him and to go a distance, would he go do you think?—A *kamin* would go, but a zamindar would not.

Do you think that might be tried?—Yes, I think we should try anything that cannot at once be condemned as inadvisable. It was not tried, as famine never became acute in Umballa, so that Captain Parsons had no opportunity of trying it.

It was not tried?—It was not tried in practice.

Were there many people on the works that you think did not require relief?—No, I don't think so.

Did you receive complaints from any private employers or Railway Companies?—There was one complaint made, but on investigation it was found that there was no foundation for it.

The Southern Punjab Railway gave considerable relief?—It gave immense relief.

Do you think the people were getting higher wages there?—They were I have no doubt. They worked very hard for it.

The Code wage is a low one in the Punjab?—Yes, it is low. It is low for a man who works for money; not low for villages and agricultural tracts in the Delhi Division.

As to the Sunday wage, are you in favour of giving it?—That would depend whether you allow a margin during the other six days. I should prefer not to give the Sunday wage, but to allow them an opportunity of earning an equivalent for the Sunday wage by a little harder work.

I see in reporting on Mr. Higham's wage proposals you think that his Y Class should get 32 ounces or sixteen chattaks?—That was on the assumption that there was a Sunday wage and flour basis.

If it were on the grain basis?—I think I should adopt Mr. Higham's proposals.

Considering you have abolished A Class?—I think 19 might be adopted. That is Mr. Higham's proposal.

In Z Class you propose 14 or 12?—That is all on the flour basis.

The basis you would accept is all 13?—Yes.

In your famine you had very few people, I think in D—the bulk were in B?—I was always trying to point out that when I noticed too many in B, I pointed out the necessity for revising the classification. I think towards the end we had a very fair proportion in D.

Having regard to the fact that in many districts the carriers were mostly in the B Class, do you think that Mr. Higham's wage of 13 chattaks for the carriers is a sufficient one?—Perhaps it is a little low looking at it from that point of view.

How did you arrive at the conclusion that Mr. Higham's is a fair one?—I was not aware of the fact that such a large proportion of workers had been returned and had received wages in the B Class.

Captain Dunlop-Smith said the loss of cattle was 85 per cent. of plough and well cattle in Hissar. Do you agree with that estimate?—Captain Dunlop-Smith took the trouble to verify it in many ways and I see no reason to doubt it, taking into consideration the losses and the numbers which did not come back.

The death-rate was very low till the end of the famine?—Yes, till the cold weather.

Do you connect that with scarcity?—Yes, I think it must be connected with it.

In other Provinces we tried to ascertain whether any rings for the artificial enhancement of prices of grain had existed. Was that the case at all in your Division?—I do not think it was. I think the price was a natural one.

As regards Native States, did not any Native States of your Division put embargo on the export of grain?—Yes, one State under my control did it and kept it up for a considerable time. It was the Nahan State, and then there was a great scare produced in some of our districts by the embargo placed on the export of grain by Nabha and also Patiala, I think. It was discontinued, however, on the matter being brought to their notice.

These States that acted on this suggestion, did they acquiesce in the policy?—No. Nahan was not satisfied with the reasons I gave him.

Those are contained in the Local Government Circular?—Yes.

In regard to your relations with the Public Works Department, had you any difficulty at all in working the Code?—None whatever.

It is said that more might have been done in Delhi for weavers and artizans. Could you give us any information as to what was done with Delhi artizans?—Nothing was done by Government. There were large allotments made to Delhi from the Charitable Relief Fund, and I don't know to what extent that was given to these artizans, but they were in great distress.

Was it ever considered whether the provisions of the Code with regard to weavers and artizans should be put in force?—No, not seriously, or rather I should say so as to have any practical effect.

If you had a similar famine, do you think you could attempt to do anything on behalf of Government?—Not easy to say what could be done. The work that they turn out is art-ware.

Not much weaving?—No weaving.

I suppose the labour is a comparatively small part of the total cost of the product?—Yes, the materials are sometimes very valuable. It would involve locking up a lot of money.

(*President.*)—Your suggestion with reference to remissions or suspensions of tenants' rents would require legislation?—It would, yes. At present you can only extend suspension to a tenant when a landlord's revenue has been suspended. The rich men who would now presumably have to pay are the men who have got the tenants, and consequently tenants would suffer. There is also another difficulty; the Revenue Courts might fix long instalments in their decree for rent, but that would only carry a tenant over one harvest. It is not at all likely that at the time of fixing instalments the Revenue Courts would foresee a series of bad harvests, and consequently if there was a second bad harvest on top of the first, the tenant might lose his occupancy rights.

The discriminating system, has that been introduced by Circular?—By a Circular of the Financial Commissioner.

Mr. R. Clarke.

5th April 1898.

It is the views of one Commissioner communicated to other Commissioners and Deputy Commissioners for information and guidance.

It has not been laid down as an order ?—No. There was an order of the Punjab Government saying that the Lieutenant-Governor approved of the principle.

Mr. Wakefield, in describing the system upon which he worked on the Ghaggar Canal, told us that the system was this, that the wages paid were either A wages or D wages and the task was a pretty full one. A man who did his work got the A wage; otherwise he got only the D wage. That gave people a good incentive to work hard, and at the same time they never got paid less than the D wage or subsistence wage, and Mr. Wakefield and one other witness here examined were of opinion that though the D wage was very liberal practically the people who made money out of it were very few. What do you think there is to be said against this system ?—It has certain obvious advantages. If the famine was very severe, you might use up your works very quickly by encouraging people to do too high tasks.

I suppose you might contract people ?—Yes, but that would increase numbers unnecessarily.

There has been great controversy and difference of opinion as to whether the D wage is sufficient for the working man. It was originally intended for a weakly working man doing a nominal task; but in a great many parts of India it has now been treated as an ordinary wage for the great bulk of workers, and in Madras they protested against this and thought it was not sufficient. There is this to be said against it, that it is a great deal less than the wage you give to simple imprisonment prisoners. I understand you now to think that it is a sufficient working wage for the bulk of workers ?—With a slight increase, I think one could say it was sufficient. It might be increased by a chattak. It was very nearly sufficient. All looked very well except those who came from great distances in the early stages.

Where D wages were very commonly used do you remember what staple was used ?—I think it was gram. There was so little difference between the price of staples it did not much matter.

You don't think that the people had any other way of supplementing the wage in the form of food ?—There were the jungle products which were largely drawn upon everywhere.

Was meat very cheap in Rohtak, as it was in some other places ?—Oh yes; very cheap. It was actually cheaper, weight for weight, than wheat almost.

(*Mr. Fenton.*)—I think you said that 75 per cent. is too large a percentage of the grain item, and that it tends to give them more than they require ?—Yes.

In the majority of districts the grain equivalent method was not used ?—It was dropped on the ground of being apparently too high, *i.e.*, in Karnal and Rohtak.

Therefore the D wage calculated under the section 166 method would be less than under the grain equivalent method ?—It would be, yes.

Mr. Higham's proposal of 13 chattaks is the D wage on the 174 ?—Yes.

Does not that fact counterbalance the famine allowance in the rates which otherwise would appear, *i.e.*, the D wage that he proposes to give is calculated on the assumption that the extra item is 75 per cent. of the grain item ?—Yes.

On the other hand, it is now apparently admitted that everything should be on the grain basis ?—At the time I wrote I *supposed* it was a flour basis.

What do you consider was the difference per cent. between flour and grain ?—About 10 or 11 per cent.

I think you said 50 per cent. ?—I said 50 per cent. was what I considered to be the proper equivalent of the minor items in the Delhi district.

So that there is still a margin of 15 per cent. if you calculate on grain ?—Yes.

What I want to ask is, does that 15 per cent. counterbalance the lowness of the D wage as proposed by Mr. Higham ?—I don't think it would entirely. It is difficult to say. To some extent it would probably.

LALA JUGAL KISHORE, Pleader, Delhi, called in and examined.

Lala Jugal Kishore.

5th April 1898.

I put in a written statement of evidence.

The facts relating to the recent famine operations within my experience are the following:—

The pinch of famine being severely felt owing to the dearness of provisions from failure of the rains and of the harvests in the usual months of June, July and August 1896, a fund was started mainly with the view of giving assistance to people of the middle classes, whose means of livelihood had been reduced by the depression of trade, or whose means had become insufficient for the support of their families on account of the famine prices of the food-grains. In particular the fund was intended for the assistance of the women, who by customs of this country were precluded from leaving their houses in search of employment, or to work on a relief work. There was already considerable distress among this class, as all Hindu marriages were stopped on account of the year being inauspicious, and consequently but little demand for embroidery which was prepared by this class.

The fund reached the limit of R18,168 from the following communities:—

	R
(1) Europeans	1,111
(2) Hindus	13,421
(3) Mahommedans	3,635

and the above with the addition of R53,600 from the Indian Famine Charitable Relief Fund, and R160 from Mrs. Tucker of Lahore, aggregated R68,929.

The main object in distributing relief was to save human life and to be as economical as possible.

The following measures were adopted:—

I.—List of all persons requiring relief was prepared.

II.—There being 15 wards of the Delhi Municipality, Ward Sub-Committees, consisting of five members in each, were formed for the actual distribution of relief. Ward No. 15 being a European ward was exempted from the operations of relief.

III.—Two modes were adopted by which relief was given—

(*a*) by free gifts of grain;
(*b*) by cheap rate system.

IV.—A General Committee was appointed to exercise general control and supervision of relief operations and of the funds subscribed and allotted.

V.—Three shops at principal places in the city easily accessible to all needy persons were opened.

VI.—Separate ward registers were prepared in which the names of all persons requiring and obtaining relief were entered.

VII.—A small Executive Committee was appointed to regulate the distribution of relief throughout the district.

VIII.—A small Finance Sub-Committee was appointed to examine and check the Famine Relief Fund accounts.

At the period of maximum pressure nine per cent. of the population was placed on gratuitous relief, as the number of tickets issued or presented at the shops was 7,042,* out of which 915 tickets were given to Hindus and 6,127 to the Mahommedans, the reason being that there were good many Mahommedans suffering from want of embroidery work and other employment, and besides this, the Hindus did not stoop to depend on the charity of the State.

As to gratuitous relief—Questions 148—171.

* This figure represents only three per cent. of the population, but as the ticket-holders supported their dependants as well out of the grain dole, the average of persons so relieved comes approximately to three times the number of tickets, and therefore nine per cent. has been given.

The persons so relieved did not belong to the agricultural classes, but to respectable poor classes, whose means were found quite inadequate for their support, and who were all incapable of employment on a relief work and had no resources of any kind.

In the commencement a good many persons did not like to take any kind of relief and maintained themselves by sale of their jewelry, utensils and other articles, but at the end, finding no other way of saving their lives, and there being no other trade, labour or wages of any kind to live upon, they were compelled to throw themselves upon the gratuitous relief for support.

In ordinary years such persons were supported by the income of their trade or by their relatives, but in famine times the trade was at a standstill and the relatives we

unable to maintain themselves and therefore could not at all help their incapable relations.

The persons who received gratuitous relief were chiefly women, and at least two-thirds of the number belonged to the *parda nashin* class.

I do not think there is any likelihood of a more severe type of famine in any future year, and if so, the number of persons requiring aid of the State will not be much more than the number of persons in need of State help during the present famine.

I do not think it may be safely presumed that no great amount of gratuitous relief is required if the number of relief workers attending the relief works open in a district are small, as it is quite possible that there may be found a large number of persons whose social position will not allow them to attend on relief works, even at the risk of starvation. As a test of necessity, I do not approve of the practice to require the incapable poor to accompany the able-bodied relatives to the relief works, and to remain there as dependants, because it entails unnecessary hardship upon the incapable poor to accompany the able-bodied relatives.

I think gratuitous relief should be given to an incapable person even though he may have an able-bodied relative bound to support him declining to go on to the relief works, as owing to the *parda* system, or age, or social circumstances, the incapable person may decline to go on to the relief work.

In the Delhi district there was hardly any instance in which gratuitous relief was given to any person capable of labour on the relief works.

It may be presumed that gratuitous relief at home is very popular with the people, but I do not think it is sought for by many who are not absolutely destitute or who are capable of labour on the relief works so far as Delhi is concerned, because in my opinion the citizens of Delhi have not altogether lost the sense of self-respect to such an extent.

In our district the circle and inspection organization was so well regulated, and well informed, that gratuitous relief was restricted only to those who were incapable of work, and would otherwise have starved.

The Sub-Committee members (influential persons living in the wards) were required to go to each mohalla and there, from their personal knowledge and with the aid of the mohalla people, to ascertain the real state of things, and grant the relief only after being so satisfied.

The successful administration of this form of relief requires a larger staff of capable supervising officers, whether they are paid or non-paid officials.

Acceptance of such relief no doubt to some extent places social stigma upon the recipient, but arrangements were so made that this was not known to any of the recipient's relatives, or caste-fellows. The recipient having been supplied with a ticket, was not required to attend in person at the shops to obtain the relief, but was at liberty to send any one on his or her behalf, as the case may be, to obtain the relief.

The gratuitous relief given by the State does not lead to the drying up of private charity, and tend to make the people cast their customary obligations for the support of the poor of the locality upon the State, because the charitable institutions of Delhi people, Hindus or Mahommedans, in the shape of *sada bart*, are different from the European point of view and in no way are dependent upon the aid of the State.

None of the persons receiving gratuitous relief were employed on light manual labour on relief works in the Delhi district.

Kitchen system is not much appreciated in this district. Respectable poor (*sufedposh*), especially Hindus, accept gratuitous relief only when reduced to the last extremity of distress, but cripples, beggars and low caste people, having no position to lose by appearing in public, resort to the kitchens.

Caste feelings are very strong in the way of receiving cooked food in the high castes of respectable poor, and they would certainly be excluded from receiving gratuitous relief if State kitchens are substituted in its place.

In the Delhi district almost gratuitous relief was given in fortnightly and monthly doles of grain and only R128 cash was given. I advocate the adoption of both the plans as circumstances require.

To a very small extent the relief was given in the actual houses of the people, but in the majority of the cases they were required to repair periodically at the shops appointed for the purpose.

There was no extortion of any kind on the part of the persons employed in the distribution of gratuitous relief, and there was not a single instance in which any person paid money or surrendered part of the dole, in order to be placed on the gratuitous list.

The whole of the gratuitous relief in the Delhi district was administered through unofficial agency.

As to relief kitchens—Questions 193 to 198.

This practice is, however, open to objection, as it is very likely that the recipient after having received his dole of relief from the kitchen may go round the city a-begging. In my opinion the condition of residence should be strictly enforced in the case of relief kitchens.

The kitchens are not required chiefly in connection with relief works, for the non-working children and other dependants of relief workers, but they may advantageously be established elsewhere for the relief generally of the incapable poor.

In my opinion it is not at all expedient to substitute kitchens for gratuitous relief, either at the beginning or end of a famine, because it is very likely that professional beggars will take advantage of the kitchens at the expense of more deserving men, who would not resort to the kitchens on account of caste or social prejudices.

Only one relief kitchen was opened by the Municipality where residence was not the condition prescribed, and cooked food (*roti* and *dál*) was given to all persons deserving of it who applied and attended the kitchen with a ticket supplied to them for the purpose.

The kitchen was under the charge of a Sub-Committee appointed from among the members at a meeting of the Municipality.

The average daily attendance at the kitchen of recipients of cooked food, from April to October 1897, was 634, and the expenditure incurred from the Municipal Fund was R9,063, and the cost of food per head daily was 7 pies.

Famine relief works.

The three following famine relief works were taken in hand in the Delhi City:—

The first was the levelling of old kilns, and filling up hollows in Mauza Khandrat Kálan for a fifth trenching farm, and in the same connection the digging of a watercourse for canal irrigation at a cost of R4,696.

The second work was the filling up of the hollow near the Mori Gate in the Civil Station, which had long been an eye-sore and a sink for rubbish; the expenditure incurred on this work was R3,454.

The average number of relief workers, including men, women and children on both the above works, was 839 daily, and the wages were as below:—

R 0-1-9 for diggers (men).
„ 0-1-6 for carriers (men).
„ 0-1-3 do. (women).
„ 0-1-0 and „ 0-0-9 do. (children).

The third was the bringing back water of the Jumna river, but this work was done by contract and no further account can be given. The amount on this work was R3,756.

As to private charitable relief as auxiliary to State relief—Questions 227—239.

In my opinion the opening of grain shops where wholesome food-grains would be sold at rates below the prevailing market rate, would be a legitimate method of giving relief to respectable persons with small fixed incomes, and the opening of these cheap grain shops, if the benefit be extended to only a selected number of persons, will not to any appreciable extent interfere with the private trade. A few such shops were opened in the City, and did not at all interfere with the private trade, and as far as I am aware the opening of such shops from the Indian Famine Charitable Relief Fund did not operate to steady the market and prevent fitful raising of rates.

In my opinion only such agriculturists as are helpless by the loss of their cattle, and have no implements of husbandry, and seed, should be helped under Object IV.

I think the Charity Fund could not be properly applied in relieving agriculturists who are in a position to get statutory loans (*takavi*) from the Government.

I regret I am unable to describe the nature and the extent of the relief granted from the Charity Fund in the whole of the Province, nor the number of persons relieved under each object, but can explain these particulars as far as the Delhi district is concerned.

Lala Jugal Kishore.

5th April 1898.

The distribution of relief commenced from the 1st of November 1896 and lasted up to October 1897.

Three kinds of tickets for grain doles were given to respectable poor.

I.—Full free—

(*a*) For men 12 seers, fortnightly, from November 1896 to March 1897.

Do. 24 seers, monthly, from April to 15th June.

Do. 20 seers, monthly, from 16th June to October 1897.

(*b*) For women 8 seers, fortnightly, from November 1896 to March 1897.

Do. 16 seers, monthly, from April to October 1897.

II.—Half free—

(*a*) For men 12 seers, monthly, from May to 15th June 1897.

Do. 10 seers, monthly, from 16th June to October 1897.

(*b*) For women 8 seers, monthly, from May to October 1897.

III.—Cheap rates—

(*a*) For men 16 seers, fortnightly, from November 1896 to January 1897.

Do. 32 seers, monthly, from April to July 1897.

Do. 24 seers, monthly, from August to October 1897.

(*b*) For women 12 seers, fortnightly, from November 1896 to January 1897.

Do. 24 seers, monthly, from April to July 1897.

Do. 21 seers, monthly, from August to October 1897.

The cheap rate system was stopped in the months of February and March 1897.

The amount expended on full free doles of grain within Municipal limits was—

R25,188-6-8 on half free;

„ 8,185-1-8 on cheap rates.

Rupees 17,519-8-8 and 2,546-0-6 was the amount expended in full free and half free tickets in the towns and villages of the Delhi district.

The total amount expended on gratuitous relief was R53,439-1-6.

The number of persons relieved under each object was as follows:—

Object I.—3,000 persons who received blankets and *lihafs*.

Object II.—Nil.

Object III.—7,042.

Object IV.—150—amount expended R4,509-6-0.

Under Object I, *lihaf* was the most popular, and evoked the greatest gratitude.

Under Object III the opening of cheap grain shops did the greatest amount of good at the smallest cost to the Fund.

Under Objects III and I R900 were given to the St. Stephen's Zenana Mission Hospital, Delhi, for the food and clothing of the in-door patients and for the distribution of grain to the respectable poor patients attending the hospital.

As to the ordinary food of the people—Questions 273—280.

The following are the food-grains ordinarily used in their homes by well-to-do labourers and artizans:—

Town—

(*a*) *Summer*—Wheat, makkai and barley.

(*b*) *Winter*—Bajra, jowar, gram and môth.

Generally such meals are taken twice a day, and ordinarily consist of *bread*, *dál* and *vegetables*.

If any of the ordinary food-grains happen to be unprocurable, resort is generally had to baijhar (mixture of barley and gram).

Only cheap description of wheat was used in the kitchen, and only one meal a day was given at the kitchen which consisted of *bread* and *dál*. No complaint was heard of as to the kind of food, as the people who resorted to the kitchens were mostly beggars and cripples, and were not generally in a position to complain.

In the recent famine the prices of food-grains were much higher than in other years.

(*President.*)—You were Secretary of the Executive Committee for the Indian Famine Charitable Relief Fund, Delhi?—Yes, Sir.

You held that office from the first?—Yes, from the 1st November 1896 up to January 1898.

When was this Fund first started?—It was started on the 29th September. Work commenced on the 1st November 1896.

The subscription was raised entirely in the city of Delhi?—Yes.

(*Mr. Bose.*)—You gave three kinds of tickets for grain doles to respectable poor. They were from time to time changing?—Yes.

Why?—On account of the rate of grain prevailing in the market.

Could you give any figures showing how many were relieved under the 3rd Class?—Yes, 7,042.

That was the total of all?—Yes, under Object III.

You mean the cheap rates?—No, by cheap rates, only 2,640 were relieved.

And what was the loss to the Charity Fund or cost of this cheap rate system?—The cost was R17,519-8-8. No, R25,188-6-8 and R8,185-1-8 were in full free and half free tickets.

What quantity of grain did you actually give?—Different quantity to heads of families and to single persons.

Did you give it to the heads of families?—To heads of families and also to single men and women.

Did you adjust the quantity of grain they were to receive according to the number of persons?—Not in that way directly, but fixing a certain quantity for each kind of ticket, we gave the tickets according to the number of persons in each family.

I believe in Delhi you gave relief to artizans?—Yes, Sir; to very few artizans; mostly to respectable poor.

You made no attempt to relieve artizans?—Yes, we did. We gave them relief as respectable poor who could not go on relief work. We tried to help them. There were a good many women who did embroidery. We helped them to a great extent: helped them by these tickets, but not in their own trade.

What did the price of grain range from?—From 8 to 10 seers a rupee.

(*Mr. Holderness.*)—I see that Khan Sahib Muhammad Hassan Khan says that this gratuitous relief which was given by means of grain was very demoralizing. Did you find that so?—Yes, it was.

In what way?—I don't quite understand.

What the Khan Sahib says is: "The moral effect of our relief measures in many cases was very far from satisfactory. Many persons who were in the habit of living upon the honest product of their own labour before the famine are now, while plenty of work is available, loth to go back to their former honourable, though hard, life." Is that your experience?—Yes. If they had gratuitous relief why should they go to work. When we started this Fund there were no marriages; now marriages have commenced, everybody can do his business.

The Khan Sahib goes on to say some of these persons actually sent begging letters to wealthy people. Have you any experience of that?—A good many came to me too after I stopped relief.

You did not attempt to keep them employed in their own trades? No, Sir.

You say now that demand for embroidery work has started up again?—Yes, not fully, but sufficient to maintain people who do that work.

You say that many people maintained themselves at first by sales of jewelry, utensils, etc.?—Yes, there were a good many cases among Hindus especially.

Why especially among Hindus?—Because they did not like to depend on the charity of the State. You will find that a good many Mahommedans and very few Hindus got relief from the Charitable Relief Fund.

Did you ever come across families who seemed to be in distress but refused to take relief?—Very few.

I suppose you worked it, as you say, by wards?—Yes, there were 15 wards in the Municipality, 14 getting gratuitous relief and the 15th being a European ward it was excepted from the operations of relief measures.

But some did not seem to work very well, did they?—Yes, all worked well.

According to Ghulam Muhammad the apathy of some of the Ward Sub-Committees was discreditable. Was that your experience?—Not to my experience. All worked in good harmony.

Were there any cases of fraud?—Yes, at the end. Munshis employed on the shops committed frauds. They were caught cashing cheap rate tickets at one time though not ordered to do so, and were dismissed and then everything stopped.

How did they get tickets to sell?—A man who could not afford to buy grain brought his ticket to a shop and gave it to the Munshi who did not give him full value.

That was towards the end?—Yes.

Did the *banias* of Delhi complain about these cheap tickets?—No, never.

Where did you get your grain?—We bought it in Delhi from wholesale dealers. Once we bought some stock from Ghaziabad, 10 or 12 miles from Delhi.

Prices went up high?—Yes, very high.

Were there any riots—grain riots?—No, none.

You say that you advocate the adoption of both grain doles and cash doles as circumstances required. How would you discriminate circumstances?—There were a good many persons who did not take relief. If there had been a cash dole, and any good man had gone and given cash to a respectable man or woman they would have gladly taken it.

This gratuitous relief is Government relief?—No, Charitable Fund relief.

When it was given in grain was it uncooked grain? Some refused to have cooked grain?—Yes, cooked grain was never given. If a cash dole had been given they would have gladly taken it.

Is not that a good test—the objection to take grain is rather a frivolous one?—In very exceptional cases there were such objections. People generally very gladly received grain relief.

Did you ever find persons selling free grain tickets for money?—No. Cheap rate tickets were sold, but not free tickets, and therefore we arranged from the end of August to give if males six seers, if females four seers of grain without payment so that they may not be able to sell them.

Did they buy a certain quantity of grain?—Yes, they had to buy.

You gave the cheap rate ticket authorizing a man to buy 32 and a woman 24?—Yes.

(*Mr. Bose.*)—At what rate did you give grain at the cheap rate?—There were different rates as given in my written statement.

How many seers per rupee was it above the ordinary rate?—Say 2 to 4 seers above the ordinary rate.

(*President.*)—You say only one relief kitchen was opened. Where was that, inside or outside the City?—Outside the Ajmeri Gate.

What class of people used to go there?—Low caste people, beggars, etc.

Was it well attended?—Yes; 631 was the average attendance.

As a rule you are against kitchens?—Yes, I am against kitchens. They are not much appreciated in the Delhi City.

Nobody but the lowest classes go there?—Yes.

All classes will go to *sada bart*?—But all classes cannot get *sada bart*; there are two or three places where *sada bart* is given. They have got a fixed number.

I mean all classes of people of good caste will go to *sada bart*?—No, not *Banias* nor Khatris, or any other higher class people. Brahmins of out-stations generally go.

A Brahmin won't go to a kitchen?—No, he cannot. Brahmins never eat anything but what they cook for themselves.

At the *sada bart* they get grain?—Yes, *ata*, *dál*, *ghi*, fuel, etc.

I see where you give the detail of daily wages, a man carrier was paid R0-1-6 and a woman carrier R0-1-3. They are both doing the same work. Do you think it necessary to make a difference?—Yes, some distinction must be made. This is very low, it should be increased. Rupee 0-1-6 is not sufficient for anyone.

(*Mr. Holderness.*)—Who fixed these wages?—These were fixed by the Punjab Famine Code as minimum.

You say a man ought to get more than a woman, even when doing the same work. Why?—It is said a man does more than a woman.

Even an old and feeble man, and men doing carrier's work are generally old and feeble?—No, not generally feeble.

I see you say that the cheap rate system was stopped in February—March 1897?—Yes, we had very little funds, and stopped one system and went on with the other. No other reason.

How did you decide who to give the blankets and *lihafs* to?—These were generally given to the respectable poor. Most were given to persons who got the tickets, because they were men of families and they got the *lihafs*. The people disliked the blankets.

If those blankets and other clothes were given to respectable poor should it not have come under Object III?—Yes, I suppose so.

MR. H. C. GRANVILLE, Executive Engineer, Kohat Provincial Division, called in and examined.

I put in a written statement of evidence.

A.

Departures from the prescriptions of the Punjab Famine Code which have occurred in the Province during the recent famine.

On the Jhelum Canal works, of which I had charge from early in March 1897 to its close at the end of June 1897, every effort was made to work in accordance with the prescriptions of the Punjab Famine Code.

Please read my proposals for amending the Punjab Famine Code attached to my report on the Jhelum Canal Famine Relief Works.

Section 130, Punjab Famine Code, was not complied with except on days when the people could not work at all.

Section 131.—No payments for Sunday were made on Saturday evening. The work establishment had no rest on Sunday, as they had to make measurements of work done during the week to complete pay sheets, etc. No payments were made on Sunday.

Sunday is the first day of the week in all reports sent to Government, and the wages for that day are paid during the week to which it belongs.

Section 134 was not complied with.

Section 136.—Last clause was not complied with.

Section 137.—Payments were made twice a week. Payments were made direct to each worker and not through gangsmen.

Section 138.—All workers who did short work were given the "minimum" wage.

Section 141.—The middle clause was not complied with because it was found impracticable.

Section 142.—The last clause was not complied with; people were not forced to live in the huts provided; they refused to live in them, preferring residence in the adjoining villages or going to their homes, in some cases 8 miles away from the works, and walking 16 miles per diem in addition to working on the canal.

B.

Degree of success which has attended the measures adopted considered primarily with regard to the relief of distress and the saving of human life, and secondarily with regard to economy.

(*1st*). The measures adopted were completely successful in relieving distress and saving human life. There was no severe distress, but there was scarcity. The timely opening of the Jhelum Canal works afforded great relief to the people of the Gujrat district, and even to distressed persons of the Jhelum and Shahpur districts adjoining.

Mr. H. C. Granville.

5th April 1898.

(*2nd*). The cost per thousand cubic feet was R13 about. The average rate at which the work could have been executed by contract is R5-8-0.

The amount of work done was about 30,208 thousands of cubic feet. Therefore loss to Government (R7⅓ × 30,208)=R2,26,560, or say 2¼ lakhs of rupees approximately.

C.

Advice as to the measures and methods of working which seem likely to prove most effective in future in these two respects.

MEASURES.

1. Prepare carefully the programme of relief works for each district. Be ready with detailed plants and estimates for the work proposed. Complete projects for canals, for drainage schemes, for irrigation works by means of impounding reservoirs and lakes, for feeder railways and trunk lines of railway should be prepared before scarcity begins and distress is felt.

2. Alter the financial rules so as to admit of the expansion of ordinary public works, when scarcity occurs, with a view to postponing or if possible preventing famine; also to admit of famine money being spent on works with capital accounts without debiting the whole of the normal cost to the capital accounts of the works.

3. Designs and estimates for hutted camps, poor-houses, kitchens, etc., should be approved by the Local Government and quite ready for use when scarcity declares itself.

4. A committee of experts should be appointed to settle the forms of accounts for use on relief works under each system likely to be adopted. Greater simplicity and uniformity is most desirable. The manner of rendering and auditing these accounts should also be considered and settled. Ready-reckoners for use on works should be compiled.

METHODS.

5. Test-works and famine relief works generally should be started on the piece-work system, and the task-work system should only be introduced when it has been found by experience that the piece-work system does not afford the necessary relief.

6. With the exception of test-works, small works near towns, small bunds and village tank work, all large famine relief works should be placed from the commencement under the control and supervision of the officers of the Public Works Department. The officers of the Public Works Department should co-operate loyally with the Civil officers, and the latter should decide when piece-work should be changed for task-work or *vice versâ*.

7. The Famine Code should provide for each of the systems detailed in paragraph 41 (K) of Mr. Higham's final report on the management of famine relief works, and the instructions under each system for the guidance of officers should be complete. It should be decided by the Civil Officers in co-operation with the officers of the Public Works Department as to where and when each of these systems should be adopted.

D.

Other recommendations or opinions thought likely to be useful in future famines.

1. Where the task-work system is in force provide kitchens and feed the dependants of workers, including non-working children, twice daily, or give them a ration in the form of a dole, the dole being in grain only—the grain equivalent of the minimum daily ration prescribed in the Code for each class.

2. Residence on the works should be made compulsory for all whose homes are over five miles from the work; otherwise they have to walk long distances to and fro daily and are unable to perform the full task. No reductions of task for "distance" are contemplated by the Famine Code.

3. All persons on the work on Saturday should be allowed a wage for Sunday if they come to work on Monday (under task-work system). This wage to be the "minimum" of the Code.

4. On works conducted on the task-work system I would make all members of the same family the unit, *i.e.*, the size of the party to whom a given task is allotted, and all the members of which should be liable to fine if the task is not performed. But I would make the fine consist in placing the task party on the "minimum" or bare subsistence wage.

5. Payments to task-workers should be made not less than twice a week and to piece-workers not less than once a week.

6. There should be a poor-house on each large work. Residence therein should be compulsory: cooked food should be given the inmates. All workers who are contumacious should be confined therein and fed.

7. Grain-dealers on famine works combine to keep up prices. Every effort should be made on the part of the Civil officers to prevent this and to insist on properly authorized standard weights and measures being used in the shops on the works.

(*President.*)—You had charge of the Jhelum Canal Works during the famine?—Yes Sir.

(*Mr. Higham.*)—Is your experience of relief works confined to works on the Jhelum Canal?—Yes.

Did you ever see any relief works before?—No, I had no experience of relief works before I took charge of the Jhelum Canal.

When did you take charge of the Jhelum works?—About the 9th or 10th March if I remember correctly.

Works having been started when?—On the 26th or 25th of the previous December.

About ten weeks?—Yes, just ten weeks previously.

What was the arrangement for managing them before you took over?—They were under the Civil Department, and the Public Works officers did the professional part of the work.

What was the professional part of the work?—Allotment of tasks and measuring work done.

Who fixed the task?—Tasks were fixed by the Public Works officer.

The Public Works officer was responsible for measurements?—Yes.

And then payments?—Payments were entirely in the hands of the Civil Department.

If tasks were not worked up to, did the Public Works officer order fines?—No, he sent in his statement of the result of measurements to the Civil officer in charge and the Civil officer ordered payments to be made.

It was left to the Civil officer to decide what fines or payments were to be made?—Yes, entirely.

Were payments made by the Civil officer?—Yes.

Were they all shown in the Civil Accounts?—No, they have always been shown in the Public Works Accounts from the beginning I think.

You were not there?—I think I am correct in saying in the Public Works Department from the beginning.

The Public Works officer had no cash book?—No, he had no cash book.

Then when labourers were given work how were they classed?—Under the Punjab Famine Code—A, B, C and D Classes.

Did they receive the A, B, C and D rates of wage?—Yes. They were paid according to rations laid down in the Code. That is to say the C worker would get the C wage?—Yes.

I have it in my note that they were all paid the A wage?—Yes, for the first 13 weeks A and B were all paid the A wage before I took charge. The C Class was paid the C wage.

A and B Classes included all workers?—No, in these 13 weeks there were 40 per cent. in A, 15 per cent. in B, 10 per cent. in C and the rest in D Class.

When you came did you make any change in this respect?—Yes, I re-classified them and put them into proper classes.

Did you still adhere to the four classes of the Code?—I thought that D Class gratuitous people should come under section 140A of the Punjab Famine Code as infirm persons unfit to work who apply for relief. I considered that they should be excluded from Class D.

You speak of them as gratuitous persons. Would you regard them as dependants or as workers?—They may be dependants or may not be dependants; but they are infirm persons unfit to work.

Have you shown them in your returns as workers or as recipients of gratuitous relief?—I have shown them as dependants. They come under the head of dependants and non-working children, I think.

Is that according to the orders of the Code that they come under the head of dependants?—Yes.

(*President.*)—I understand you to say that they were working?—They were not capable of working, Sir.

You say there were no D Class labourers?—In saying no D Class labourers I mean they ought to have been shown as dependants. They received the D wage.

What is the rate of wage under the Code?—The same as the D Class wage.

Elsewhere in other Codes there is what is called the D wage for feeble workers who cannot be regularly tasked, who have a nominal task, and there is a different wage for those who cannot work at all. The D wage is for workers and the lower wage for dependants. There is a distinct difference between them. I understand all people who were below C Class were shown by you as dependants, not as workers?—At the end a certain number came in as D Class who did work. Some were shown as workers and some as dependants.

The number of children dependants that you had on these works, were they unusually large?—Yes, they were unusually large: much larger than contemplated in the Code.

What was the maximum percentage on the number of workers?—I cannot remember. I was not in charge of the works then. Captain Douglas was in charge. It is given in my weekly reports. I gave a detailed statement there.

You had 30,000 on relief works and 20,000 dependants in round numbers?—Yes.

When were kitchens opened?—I think the first week in March.

Then the number went down?—Rapidly, yes.

What was your ultimate percentage of dependants to workers after your kitchens had been established?—About one per cent.

What was the normal percentage?—I cannot give you that. I have not worked that out.

Did you have a quarter the number or half the number?—I don't know.

Was any enquiry made at the time when you joined there as to the excessive number of children?—No, no enquiry was made.

Every three adults had two children. That was the proportion?—Yes. The attention of the officer in charge of the work was drawn to the fact that there were a large number of non-working children in proportion to the number of workers on the work.

Was it found out that they were not the children of workers?—That was not ascertained, but there was suspicion that they brought children from villages.

There was no particular enquiry into it?—No.

The measure taken was to introduce kitchens?—Yes.

That resulted in the percentage going down very considerably?—Yes.

Was there any fining at all before you went there?—Very little. Most people got the maximum wage of the class in which they were working. In my final report on the Jhelum Canal I worked that out, and I showed that they must have been receiving the maximum wage practically.

To what extent did you fine them when you went there?—Those who did a full task got the maximum wage: those who did not perform the full task were put on the minimum wage.

Was there anything intermediate between the full task and the maximum wage and doing less than the full and getting the minimum wage?—No, there was nothing intermediate.

If your task was 100 and a man did it he got the full wage?—He got the full wage of his class.

If it was 90?—He got the mininum wage.

If he only did 50, would he still get the same wage?—That would have to be considered.

What do you call the penal wage?—That laid down in the Code.

How much is it below the minimum wage?—About a pice on the average.

Did you pay your wages in pice?—They were entered in pice and at the end of the week they were paid in pice. They were worked out in pies ultimately.

Under what circumstances did you fine them down to the penal wage?—When there was sufficient evidence to show that they did not do the half task.

Was this done as a matter of course?—No, it was left to the discretion of the Sub-divisional Officer.

(*Dr. Richardson.*)—Sometimes a man was physically unfit?—Yes, then he got the minimum wage or D Class wage.

(*Mr. Higham.*)—When you got into working order did you find the majority of workers earned the full wage, or were they content with the minimum?—No, it was a stimulant to them to earn the full wage. The result was workers increased considerably.

What proportion of them earned the full wage—more than half?—I should think towards the end 75 per cent. got the full wage.

There was a *bonâ fide* attempt made on the part of the people to earn the full wage?—Yes.

(*President.*)—Was the full wage the full wage of the class, or was the classification by A and B kept up?—Yes.

(*Mr. Holderness.*)—In one gang or working party had you people of different classes working together—say digger A, or carrier B or C?—They were classified according to their condition.

Then was a gang or working party paid in the aggregate?—Yes, according to the amount of work done.

How many diggers were there to a party?—If a party consisted of six then there were two diggers. The number varied.

(*Mr. Higham.*)—Did you give tasks out to large gangs or families?—Only to families.

How many diggers were there in a party?—That varied. One digger for every five as a rule.

Then you had separate measures for each party of 4 or 5?—Yes, the task was allotted according to the position of the work in the canal. That is the depth of the work. If they did their full task they got the full wage.

What do you call a gang?—The digger, his relations and his party.

You had a separate account for each digger and his party?—Yes, for each party.

I suppose you could not always adjust your task to a family?—We generally managed to get a family to form a party.

Did you attempt to vary according to the different sizes of families?—No. Work was allotted one per foot run of canal.

I suppose some parties had a few more carriers than they wanted and some perhaps not quite enough?—I think they always had enough carriers. Families closely allied to one another would co-mingle and divide into two or three parties.

Did you ever find any diggers' work to be grouped together and taken as a whole?—No.

Do you think you could have worked as satisfactorily if you had gone on piece-work?—Yes, most decidedly. Towards the end people clamoured for piece-work. I took a certain number of people and put them on piece-work for three days just to see the amount of work turned out on the same work.

Were they allowed to earn as much as they liked?—They were allowed to earn as much as they could. There was no restriction on them whatever.

What was the general result?—By piece-work they did just twice as much work.

Were those the same parties?—Exactly the same parties.

Were any of the workers there who would have been unable to earn as good wages if they had been put upon piece-work?—They were not specially selected families.

Were the workers in good condition?—Yes, in very fair condition. They were never in bad condition.

You had no weakly persons?—No emaciated persons.

So that you think the whole of them might have been advantageously paid by results without any minimum wage at all?—Yes, certainly.

You never proposed it?—I never proposed it. I think the Commissioner proposed to introduce what he called the intermediate piece-work system. The North-West system I think. When I saw people leaving the works and numbers fallen to 3,000, I said that I thought we should go on with the task-work system until work was closed.

If you were to try famine works again under these conditions, would you go in for piece-work pure and simple?—Yes, I would take up piece-work for test works until it was proved that piece-work did not provide for the population.

Do you think it would be necessary to limit the earnings?—Yes, I consider it would be necessary. Otherwise you

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would exhaust your works very rapidly in the case of a large famine.

Did you have many labourers there of a purely professional class?—No, very few of the professional class—what we call the professional earth-work class. No, very few of them.

Did the capacity and physique of workers vary to such an extent that if you gave them piece-work upon which some of them could earn a living others would have been able to earn a great deal too much?—No, I think not. The majority were in a fair healthy condition. I think that their physique improved by the work that they had to do. After being on the work they could turn out more.

How far did people come to the works?—Some came 7 or 8 miles to the works.

They did not live there?—They went backwards and forwards.

(*President.*)—I suppose they went to neighbouring villages, perhaps not to their homes?—Yes, they went to neighbouring villages. The majority went to their homes.

(*Mr. Higham.*)—I think a considerable number came from across the river?—No, I think the majority came from villages in the neighbourhood of the canal. Some came from Jhelum, the Shahpur district and Pind Dadan Khan tahsil.

Those who could not go would get shelter in the villages?—Yes.

There was no danger that your works would be exhausted?—No danger whatever. We could have gone on for months.

You recommend piece-work should always be introduced and adhered to as long as possible?—Yes.

Would you resort to the task-work system when you found piece-work failing you?—Yes.

Have you any other suggestions to make?—No.

What do you think of the Code scale of wages? Do you think them excessive or not?—I think for task-work they are excessive. I made a rough calculation before coming here, and I find a family of five on the Jhelum Canal earned easily ₹12 a month. The average wage in my report was ₹0-1-6 per worker. During the whole period of 25 weeks during which work was done the workers earned on an average ₹0-1-6⅔ each, including working children. Then the labourers employed on general duty, they earned about the same. Non-working children and dependants they received 7⅓ pies. From a rough calculation I make out that a family of five received ₹12 a month.

What is the composition of your family of five?—I think there was 1 A Class, 2 B Class, 1 C Class, 1 D Class.

Did you have 1 A Class in every family—Yes.

(*President.*)—In what way did you get to this 12 rupees?—Take four workers at 1½ annas = 6 annas a day; add non-working children or dependants at 7 pies a day = 6⅓ annas a day, which multiplied by 31 makes 12⅓ rupees really. This includes Sunday wages.

(*Mr. Holderness.*)—What would that family have earned under the piece-work system which you introduced?—Just the same. I calculated the rate per 1,000 cubic feet according to the wage I was paying then, supposing the full task was done.

They did double?—Yes.

They got double wages?—No. They were put on the minimum wage.

What was the wage basis of these wages?—The task wage.

I meant how many seers to the rupee?—I think 10 seers.

Was that the basis throughout?—No, they fluctuated from week to week.

Often?—Yes, steadily from the 10th April.

On whose authority did you alter the rates?—On my own authority.

How did you know the fluctuation in the price of grain?—I got the rates from the Naib-Tashildars.

You altered them on his advice?—Yes.

How often did he report?—About twice a week.

Did you alter rates twice a week?—Once a week at first, then I got orders to alter according to fluctuation.

With the slightest fluctuation did you alter or did you allow a margin?—No, if it was a decimal figure I would not alter. If there was a difference of half a seer I would alter the rates.

I find that the bazar rates did not correspond with the village rates. Did you work on the village rates?—Yes, because most of the workers lived in villages.

Didn't you think the village rates might be kept up?—I found the bazar rates being kept up.

The village rates were lower than the bazar rates?—Yes.

You worked out the A wage by the selling price of maize flour at 9 seers to the rupee?—Yes.

You took the ration as laid down?—Yes.

You found the total cost was 21·48. If you had worked on the grain equivalent system the wage would have been 28 pies?—Yes.

So it was calculated on the cost of the items of ration and brought out to 21·5. On the 9 seers scale it would have been 25 pies. So that your wages were lower than the wages shown in the ready-reckoner?—Yes. My letter No. 79 of the 26th March to the Commissioner shows how I calculated the wage.

In the letter you have referred to you have calculated the wages according to the cost of items composing the maximum ration?—Yes, as laid in the Code.

The result of that I understand is that the wage for A male by your calculation with maize at 9 seers to the rupee worked out at 21·48 pie as against 28 pie by the ready-reckoner of the Code?—Yes, and I paid 22 pie.

The wage for an A woman under this calculation worked out at 17·81 against 25 pie under the Code?—Yes.

And the minimum wage for a man worked out at 13 pie as against 18 pie under the ready-reckoner, and for a woman at 11·69 pie against 17 pie?—Yes.

In actually paying you converted these into pice?—Converted all pies into pice, and payment was made to the nearest pice at the end of the week.

Did many people get this minimum wage?—I can't say how many. A certain number did. I can't tell what proportion.

What is your opinion as to its efficiency?—People kept in very good condition throughout. There was no depreciation in physical condition. As I say a family was capable of earning ₹12 a month.

I understand that people were not continuously on the minimum wage?—No.

You cannot well say what the effect would be of keeping a person continuously on the minimum wage?—No, I can't.

(*Dr. Richardson.*)—It is hardly necessary to ask you whether there was any high mortality on the works; you say they were in excellent health?—Yes, the health throughout was good.

Any epidemics?—No. No unusual sickness.

Any medical aid?—Yes, an Assistant Surgeon in charge of the Medical Establishment: a Hospital Assistant to each sub-division, who had a certain number of menials to help him in carrying medicines about.

Practically his occupation was gone?—He had very little to do.

(*President.*)—I see that in your proposals for amending the Code you recommend that D Class should be abolished: that only A, B and C Classes should be left. Does that mean that you think the D Class wage is too low a wage for a man who does regular work?—No, Sir. I don't think it is too low. I am considering the task-work system when I make that statement.

At what age would you draw the line between a child and an adult? Have you ever thought of that point?—I should put a working child between 7 and 12; between a child and adult I would draw it at 12.

Would you give children over 12 wages by results?—Yes, Sir.

Is not that rather a youthful age to take?—No. From my experience I would say that children of 12 did a great deal more than women and weakly men in B Class.

Then you would let children from 7—12 work too?—Yes.

You didn't find children of 7—8 get in the way of work?—Not a bit.

I think you say that the penal wage worked out about half the adult wage. Practically it would be half the maximum wage for an individual?—Not half; it is a little more than half.

I mean in pice. Does it come out half?—Little more than half.

When you had in rare cases to impose the penal wage, did the whole party get it—children, women and men?—No, it was only imposed on individuals.

THE REVEREND MR. S. S. THOMAS, Principal, Baptist Mission Training Institution, called in and examined.

I put in a written statement of evidence.

The evidence I have to offer relates chiefly to *Gratuitous Relief* given in the City and District of Delhi. During the months of greatest pressure I spent almost all my time in connection with this form of relief and had therefore considerable experience of its working.

Funds. The funds for this relief were from (*a*) local subscriptions (₹18,328), (*b*) the Indian Charitable Relief Fund (₹50,000).

Classes helped. 235. The classes we aimed at helping in connection with this fund were *sufedposh*, *i.e.*, families of good birth and connection whatever their means of livelihood may be. At the same time there are trades which such persons would consider it undignified to follow. It must be admitted that the term "*sufedposh*" was extremely difficult to define and to adhere to.

The reason for selecting these classes was that on no account would they resort to the Government public works or to the free kitchens.

Considering the conditions of the labour provided and also of the free meal, I think the objection of the better classes to resort to them a very natural and reasonable one.

Causes of the distress. The distress amongst these classes was due to two causes—

(*a*) High prices of food.

(*b*) Scarcity of works such as they engage in.

(*a*) will have been dwelt on by many and I need not notice it.

With regard to (*b*) Delhi deserves some special notice. Though I have not the figures before me, I am assured by native gentlemen that Delhi has a much larger number of highly respectable and well-connected people engaged in silver, gold and silk embroidery than any city in the North of India. The work is done in the homes by both men and women. For a reason that I have not seen noticed in any of the Famine Reports, *viz.*, the prohibition of Hindu marriages south of the Ganges and north of the Godavery, the demand for this work suddenly stopped. This combined with high prices entailed severe distress on the classes referred to.

Main cause of scarcity of such work.

A contributory cause was also the stoppage of travellers by the plague. Such persons are large purchasers of the fine work produced by the class under mention.

Organization. The organization for regulating and distributing this relief was as follows:—

(*a*) A large General Committee of native gentlemen with about four Europeans.

(*b*) A small Executive Committee consisting nominally of nine persons, but for actual work consisting really of six members, four natives and two Europeans.

Two Sub-Executive Committees were appointed—

(1) to look after the accounts;

(2) to purchase corn and superintend the relief shops.

(*c*) Ward Sub-Committees throughtout the city with the Ward member as Chairman.

District places. A few places in the district received aid. The Reverend H. C. Carlyon was empowered to give such aid as he thought fit in Mahrouli (11 miles distant), whilst Faridabad (16 miles distant), Arab Sarai (4 miles) and Sonepat were visited by me.

Registers in Persian character were prepared by the Ward Sub-Committees and submitted to the Executive Committee, certain members of which went over every name with the particulars attached and awarded tickets of specified grain-values according to the condition of the applicant.

Tickets. These tickets were issued monthly signed by certain members of the Executive Committee. They were of two kinds—*free* and *cheap rate*. The free were of two values, one being double that of the other.

Small free were given to widows and deserted wives (of whom there were very many, the husbands having left them on account of the distress) who had not more than one child.

Full free given to widows and deserted wives with two and more children and men with more than five persons dependent on them.

Cheap rate were given to men who could earn a little, but by no means an adequate support.

Old men, cripples, etc., were awarded free tickets.

Shops. Shops where the tickets could be exchanged for wheat were opened in three places in the City. A munshi to keep a record of the tickets and a weighman to deal out the corn were appointed to each shop. These shops were visited by me pretty regularly.

I think it well to state for the information of the Commission, and for future use, some of the weak points and abuses connected with the above system—

Weak points and abuses.

(1) The Ward Sub-Committees were in several instances (not all by any means) utterly ineffective, and the information supplied to the Executive Committee was furnished by the Ward Jamadar or some other equally irresponsible person.

(2) The distribution of tickets was often left to the Jamadar and little enquiry was possible as to whether the proper persons received them.

(3) Fictitious names with full particulars were declared on reliable authority to have been furnished by one Committee.

(4) Some persons succeeded in getting relief from more than one Sub-Committee.

(5) Banias purchased the cheap rate tickets for about half their value.

(6) The munshis and weighmen in the shops conspired (*a*) to give short weight, (*b*) to mix sand with the wheat, so keeping weights right while stealing the corn.

Some of these abuses were checked if not stopped by the Committee, especially Nos. 5 and 6.

Suggestions for the future. In working this system of relief more and stricter supervision is needed than in any other form of relief.

I would therefore urge the following suggestions:—

(1) The Sub-Committees in the wards should be more carefully selected. The ward member should not be a member of the Famine Sub-Committee unless there is reason to suppose that he takes a real interest in the work.

(2) The appointment of Sub-Committees in the wards should rest with the Executive Committee, who should constantly test and supervise the work done by these Committees.

(3) Non-official Europeans should be utilised for Ward Sub-Committee and Executive Committee work far more than they were. Mission ladies for example can do invaluable work in visiting the houses and ascertaining the truth or otherwise of the statements in the registers. I believe that our work would have been far more satisfactory if the Mission ladies had been asked to co-operate. Natives have the greatest confidence in Europeans whilst they suspect each other at every turn.

229. I do not think the cheap-rate shops had the slightest effect on the grain market.

150. Not all, but a very large proportion.

152. Not having the figures before me I can only hazard an opinion based on my memory of the registers, and I should say that of those relieved at least two-thirds were women and all *parda nashins* or semi-*parda* (called *burqa-posh*).

160. Undoubtedly the acceptance of relief places a stigma on the recipient, and this fact deterred some of the neediest from accepting our help. To meet such extreme cases I would advise a small sum of money being placed at the disposal of a European member of the Executive.

164 and 165. Free kitchens, affording cooked food, would never be resorted to by the majority of those whom we helped.

One class unprovided for. Before closing my evidence, I would point out that there was one serious defect in the relief measures in this district. As I have already explained, the gratuitous relief was confined to the genteel poor. The

NOTE.—The numbers relate to the questions drawn up by the Commission for the guidance of witnesses.

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Government Public Works as long as they were open (they were closed too soon) provided I believe effective aid for the poorest classes, the free kitchen giving one meal a day to the disabled amongst these classes. Between the poorest classes, however, and those helped by the Indian Charitable Relief Fund there were some thousands of weavers in Delhi who were above going to the public works or free kitchen and were not considered eligible for the free relief. The suffering amongst these was pitiable, and had it not been for private charity on a large scale they would have suffered far more than they did. A large sum of money from the Baptist Mission Famine Fund was spent in relieving this class, and one lady spent R17,000 (seventeen thousand) in providing work for them. In my judgment some "light manual labour" should have been provided for them such as that contemplated in question 162.

(*President.*)—You are a member of the Mission in Delhi I think?—Yes, Sir.

You are a member of the Delhi Executive Committee of the Indian Charitable Relief Fund?—Yes, Sir.

Was your experience confined to relief in the City of Delhi or were you also employed on relief outside in the district?—I visited Faridabad, which is 16 miles out of Delhi, and Arab Serai 3 or 4 miles out, and two or three times Sonepat. Faridabad and Arab Serai I visited regularly once a month.

In what capacity?—As a member of the Executive Committee, I went to distribute corn. The ticket-holders in those places came to the bungalow and took the corn.

You say in your written statement "considering the conditions of the labour provided and also of the free meal I think the objection of the better classes to resort to Government public works or to the free kitchen a very natural and reasonable one." Can you amplify that—give us the reasons of the objections?—The public works, as far as I saw them, were frequented chiefly by Chamars and the Mehtar caste and the lower class generally, whereas the people we reached were distinctly a better class. Then in the free kitchen they were a most miserable looking lot, many diseased and wretchedly poor.

You don't think it was possible to give people engaged in gold and silver embroidery employment in their own trade rather than gratuitous relief?—No, Sir, for two reasons—(1) that supervision of it would be practically impossible, and (2) an immense amount of money would be required to engage in it. I may say that privately it was tried on a small scale by a missionary lady. She invested some R17,000 in this work and they defrauded her in many different ways. At the same time it did give a lot of needed help undoubtedly.

You describe weak points in the grain shop system. You say *banias* purchased the cheap rate tickets for about half their value. Was that actually proved?—I think so. There was no shadow of doubt in the minds of the members of the Committee I think. I found one *bania* presenting tickets at a shop when I was inspecting, and I need scarcely say I cancelled the tickets.

I suppose the recipients had been in a hurry to get something and the *bania* had given them a certain amount of grain and taken their tickets?—No, I think in many cases the reason was they had not money to purchase grain at whatever rate it might be sold, and hence they gave tickets to the *bania* who gave them a rupee and he got about say 2 or 2 seers advantage.

Are there many mission ladies in Delhi?—Yes, Sir. In both Missions there would be something like 12 or 15.

Do you think they would have been of use on these Committees?—Yes, Sir, they would have been of great use as visiting members, as they had access to houses, and they would be able to exercise a proper check over registers which we could not check.

You used them specially to go into houses of *parda nashins*?—Yes. Muhammad Hassan privately asked the ladies to help, and according to his testimony the result would be extremely good.

You say you think the Government public works were closed too soon. Do you remember what month they were closed in?—As far as I remember, Sir, at the end of July. I am speaking of large works. There may have been petty works after that, but I don't think there were. The large works were closed as far as I know at the end of July.

Did you see any effect from the closing?—I know that the Chamar community with which both Missions are very closely connected, suffered very considerably. They suffered more than when market prices were higher, because their work fell off completely, and they used to go to public works. Some of them had gone earlier than July and the works were closed, and I know they suffered a great deal.

Does the Chamar community live in Delhi or outside?—They live in Delhi and form a very large community.

How do they generally support themselves?—By shoemaking.

Did people economise in buying new shoes as they economised in buying new clothes?—They simply could not buy them.

You mention that between the poorest classes and those helped by the Indian Famine Charitable Relief Fund there were thousands of weavers in Delhi. How were they helped? Were they helped in any way by Government relief?—Of course the public works were open to them as well as to any other class, but for the reason I stated just now the better classes amongst them, a certain number of course, would not go because under the term "weavers" there would be certainly a great many grades, and they were not considered by the Executive Committee to come under the term "*sufed-posh.*"

No attempt was made to relieve them in their trade?—Not from public money. The only attempt was a private one.

What relief was given from private money?—The R17,000 that I speak of, Sir. They were mostly the weaver class, and cotton was given out to them, and they brought back the cloth and were paid by the piece.

In what way did they defraud the missionaries?—They were given good cotton and brought back bad, having exchanged it in the bazar. I don't know all their tricks. I was not in charge of that work, but I know that they did in various ways deceive, and of course profited by it.

The system was to give a certain amount of cotton and require the return in cloth?—Yes.

These various shifts, did they result in large loss?—Yes, I think so, and resulted in work being stopped. The ladies felt they could not carry it on. There is a very large quantity of muslin lying in the Zenana Mission now. It is a very fine muslin. A lot was sent to the Mansion House. Mrs. Steel interested herself in it and disposed of it.

Is common country cloth weaved now in Delhi by hand looms?—Yes, I think so. The class I am speaking of now do much finer work than that.

Do you think it would be possible to organize a system of relieving weavers by making them weave common cloth and using that cloth for the Charitable Relief Fund in gifts to poor people?—I don't know how far it would be possible to organize it. The difficulties of supervision would be very great.

(*Mr. Holderness.*)—In ordinary years is there considerable distress in Delhi?—I should think so.

Among decaying families?—Yes, Sir.

A good deal of assistance was given to *parda nashins*?—Yes.

Having regard to the various objections to grain shops, are you of opinion that they are preferable to money dole?—Yes, Sir.

How are they better?—People need food most, but it does not follow that they would purchase food if they had money.

It is possible to dispose of grain, but not so easily?—It is quite possible, but if you gave them money they would not buy food, but would spend it in other objectionable ways.

Do you think these abuses could be stopped by better supervision?—I think the fault was really in the *personnel* of the Committees and principally of the Sub-Committees.

Could you improve the *personnel*?—Yes, I think we could have improved them if selection had been made by the Executive Committee after careful enquiry, instead of taking those which were in existence when the Committee came into force. The Executive Committee was not appointed until the Indian Charitable Relief Fund supplied money, and these Ward Sub-Committees were formed as early as November when money was purely local. The Ward member wa as Ward member, the manager, and he practically looked on and did not care whether the people got their corn or not. The Committees were very unsatisfactory.

It really inherited the old machinery?—Yes. I may say that we tried at different times in various ways to improve the Committees, but it was a difficult matter.

You had no free kitchens?—No, not in connection with the Fund.

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You say that sometimes the acceptance of relief places a stigma on the recipient, and this fact deterred some of the neediest from accepting our help. Did that often happen?—The percentage I should say would be small, but cases were pretty numerous.

Were there any orphans in Delhi left by the famine?—I don't think there were many Delhi orphans. Our Mission School had many orphans, mostly from the North-West.

Sent to you?—Yes.

You did not get any from the Punjab?—None, I think.

(*Mr. Bose.*)—Did you invite people to you who wanted relief and did your Sub-Committees go from Ward to Ward?—Each Committee worked within its Ward, and I took out corn for the people.

Had they to apply to your office?—No, they had to apply to some member of the Ward Sub-Committee, and if he thought fit, he entered the name in a register and then that register was sent to the Executive Committee. We went over the names of the various applicants and awarded tickets.

How did you fix the quantities to be given under your three classes of tickets respectively?—According to the number of the family.

Had you only three classes of tickets or tickets varying?—We had three classes of tickets—two free and one cheap rate; but we gave one, two or three tickets according to the size of the family.

Each ticket entitling a recipient to a certain quantity?—Yes.

How did you fix that quantity?—Sixteen seers for a man and 20 seers for a woman.

Each ticket represented what any particular person received?—Yes. If there was a second person in the family we did not give more than one ticket. If there were two children and a mother we gave a ticket and a half free.

As regards abuse No. (5) mentioned on page 41, do you think the incentive for it could have been taken away if you had permitted these people who had these tickets to buy the prescribed quantity of grain in small instalments?—They were allowed to purchase four annas worth at times, and ultimately, in order to stop traffic in tickets, we decided that after a certain date (possibly the 20th of the month) we would ourselves purchase redeemed tickets, issuing a free ticket for a certain amount in lieu of the cheap rate, so that the holder of the ticket could get not the full value of the cheap rate but say two-thirds at the end of the month, if he applied to some member of the Executive Committee.

(*President.*)—Suffering due to high prices was severe, I suppose?—I think so, sir: very.

Do you think it led to an increase of mortality?—I should think not, Sir. I am under the impression it was a very healthy year generally.

Did the common wages of ordinary labour go up or go down owing to the scarcity?—I don't know very much about ordinary labour, but in the little building I did on the Mission premises I found it possible to get masons on much lower wages.

What did people say as to the cause of famine? Did they grumble very much?—I think the *Sirkar* was held responsible for the famine as it is for the plague.

Did they attribute the high prices to any action of Government?—I certainly did not hear of any particular reason assigned. It was the general impression that the *Sirkar* ought to make things cheaper somehow.

Was export particularly mentioned?—Export was referred to by the more intelligent natives.

As a general rule, I suppose, the labouring poor in Delhi are not badly off, I think?—No Sir. I think not. The ordinary Chamar can earn R10 or R12 a month comfortably—his wife and himself.

You mean at the shoe-making trade?—Yes, Sir.

Are they all Chamars engaged in that trade or some working as ordinary labourers?—Some work as ordinary labourers, but the majority are engaged in shoe-making.

Have you any idea what those who work as ordinary labourers would earn?—No, Sir. I am under the impression that a good many masons really are Chamars and a good many syces were originally Chamars.

What does a syce get now-a-days?—R6 or R7 I think, Sir.

Does he get less from natives?—I should think so.

Does his wife make anything?—I don't think the wives of syces earn.

You don't think she cuts grass?—No, there is generally a man for that.

COLONEL S. L. JACOB, R.E., Chief Engineer, P. W. D., Punjab, called in and examined.

Col. S. L. Jacob.

5th April 1898.

I put in a written statement of evidence.

Note by Colonel S. L. JACOB, R.E., *Chief Engineer, Punjab Public Works Department, with reference to evidence for the Famine Commission,—dated 8th March 1898.*

(*a*) The departures from the prescriptions in the Punjab Famine Code that came under my notice were not many. The main departures were as follows:—

(1) Discontinuance of the Sunday wage in the Hissar district.

(2) Substitution of piece-work for task-work on the Nardak Rajbaha during the closing weeks of famine operations.

(3) Much less elaborate hutting was provided than the Code contemplates.

(4) The Public Works Department had almost entire charge of the main works with much less interference from the Civil Department than the Code seems to prescribe.

(*b*) As to (1) the discontinuance of the Sunday wage, I consider that as regards the relief of distress and the saving of human life no bad effects resulted whatsoever. As regards economy it was of course considerable.

(2) As to the substitution of piece-work, I consider it was fully as effective in the relief of distress and saving of human life as the task-work, or if anything rather more so, as there was so much less room for cheating in it. It wonderfully simplified the work, got rid of the greater part of the establishment which is the bane of famine work proper, and was much more economical. The details of the two systems of work on the Nardak Rajbaha are given below:—

	Quantity of work done in cubic feet.	Cost of labour only to nearest rupee.	Cost of all charges to nearest rupee.	Units employed.		Rate per cent. of labour only.	Rate per cent. for all charges.	Remarks.
				Diggers.	Carriers.			
		R	R			R a. p.	R a. p.	
Piece-work . .	15,912,000	44,600	67,053	123,139	199,180	2 12 10	4 3 5	From 1st March 1897 to 3rd July 1897.
Task-work . .	9,631,000	22,578	31,449	53,318	49,734	2 5 6	3 4 3	From 3rd July 1897 to 30th September 1897.
TOTAL .	25,543,000	67,179	98,502	176,457	248,914	2 10 1	3 13 8	Includes R7,581 paid to dependants, etc., excluding this rate is R3-9-0.

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(3) It was not possible to arrange for the hutting as provided in the Code. I fear that the result was during storms an increase of distress and probably increased mortality, but it was physically impossible to hut properly on the Ghaggar Canals. The cost too would have been very great.

(4) The result of leaving the Public Works Department in almost entire charge of the work was happy. This was invariably the case in the Irrigation Branch, where I then was.

In the General Branch there was sometimes mixed superintendence with consequent friction and probable increase of cost. I cannot say that the distress was actually increased thereby, though with diminished efficiency this result would be expected.

(*c*) and (*d*) As to the future I have given my views at some length in two printed notes, dated 6th January 1898.

Briefly my opinion is as follows:—

(1) Seek to prevent famine.

Very much has been done in this direction and more can be done. So much so that even such a drought as the late one need occasion no famine.

(2) Have a good programme of works ready. This is a troublesome, lengthy and expensive matter, especially as regards irrigation projects, but it is very necessary. A good programme cannot be made during famine.

The best kind of works are those which it is intended to make eventually, only they are in abeyance for the present for lack of funds or similar reasons. Of these undoubtedly the best are canals: but a road which it is intended to make *and keep up* forms an excellent work, but an embanked unmetalled road is generally a nuisance and ends by becoming worse than it was before embankment. Better dig trenches and then fill them up than this. If there are, as there should be, good Provincial programmes well thought out for several years ahead, then when a famine comes the work of three or four years can be concentrated into one, all the works being useful instead of being, as they are sometimes, worse than useless (as for instance the roads of embanked sand made in the Hissar district).

Railway embankments for railways to be made are also excellent.

Next to these are useful works which cannot be made because though useful they could not pay. Most excellent works of this kind can be designed in connection with the torrents which now devastate the country coming down from the hills. Other works of the kind are those in connection with canal and other large capital projects.

Only in this case the financial rules need modifications. Engineers will not design works of this kind if the whole capital cost is debited to the work for ever and frequent enquiries likely to be made why the work does not pay.

Only such part of the capital cost should be debited to the work as it is worth from a commercial point of view; the rest should be debitable to famine, it being understood that the work is only done because of the famine.

Tanks are very unsatisfactory as they are kept practically for one village only; every one in that village turns out to earn a little because it is so handy, whether they are distressed or not. Tanks should, therefore, seldom be dug, and if dug the wages should be an absolute minimum with no extras at all.

(3) Expand ordinary public works of a kind suitable for famine work in distressed districts. The greatest possible mistake occurred in the past famine in the Punjab by doing the very opposite. There was sufficient grain to be got for money, the distressed people were able and willing to work and support themselves as usual, but instead of expanding we contracted work, forced the country into famine, and then had to pile on famine works to meet the famine we had in measure ourselves created.

I think I may say that I have had a very thorough acquaintance with the late famine affairs in the Punjab, and I am fully persuaded that all the distress might have been met by the expansion of ordinary public works supplemented by poor-houses and a little district and village relief for the indigent, and that the elaborate machinery of the Famine Code need never have been resorted to at all.

I am also of opinion that in future famines or times of drought, unless they are something far beyond what has been known in the last 40 years, that ordinary public works if properly expanded will meet all the needs if supplemented as above proposed.

(4) If, however, it is thought that something more is wanted, piece-work will quite suffice. Piece-work can be adapted in a variety of ways to the necessities of the case, and the task-work system of the Code will probably never be needed in the Punjab unless it be in such a time of confusion that it cannot be applied owing to rebellion or war, etc., in addition to famine.

(5) Simplify the Famine Code as much as possible as recommended by Mr. Higham. Any one who knows the state of affairs in India and the corruption that obtains in all except the highest class of establishment, will recognize that every bit of requirement and elaboration makes an opportunity for illicit gain. Far better a ruder system which the European officer can supervise himself than the apparently better and more elaborate one which requires a large establishment being improvised in which nearly every member is trying to make unlawful gain in every way he can. Had this been fully recognized I do not think that the attempt would have been made to elaborate to anything like the extent which has been done.

(6) The Local Government should be allowed much more latitude than was allowed in the Code: circumstances alter very much in different localities and in different conditions.

For instance why should people doing task-work at their doors in a tank, with almost no supervision, be paid the same wages as those who have to go long distances from their homes, live on the work, be put to extra expense, and be subjected to much stricter supervision?

In these in a multitude of ways those who are on the spot can gauge matters in a manner which it is impossible for those at a distance to do. All that seems wanted is that the Supreme Government should lay down the general principles only and leave all details to the Local Governments, but the financial rules must be altered in the directions stated or the work cannot be done to the best advantage.

Finally, I am of opinion that the famine in the Punjab was adequately met as regards relief of distress, but that the cost of the famine relief was considerably greater than it need have been because of the reasons already given, and I also think that it would have been possible had there been better relief programmes available and had the financial rules been different to have had more result in the way of useful works being carried on than has been the case.

For other details I can only refer to my printed notes mentioned before.

Note by Colonel S. L. JACOB, R.E., *Chief Engineer, Punjab Public Works Department, on the Management of Famine Relief Works and the Revision of the Provincial Famine Code,—dated 6th January 1898.*

1. There is no doubt a universal consensus of opinion that the present system of classification of relief labourers is far too complex, and all, except Mr. Hilton, who have been consulted, agree with Mr. Higham's three last classes, *viz.*, Y, Z, and working children. Mr. Hilton desires to sub-divide each of these into two, but he is alone in this, and I am very averse to it myself, simplicity being so necessary.

Classification.

The point in which there is some disagreement with Mr. Higham is in connection with the special Class X proposed by Mr. Higham. Many, and among them myself, would abolish this distinction. For instance, Mr. Goument, Executive Engineer, says: "I would not classify mates, water-kahars, conservancy chowkidars, etc., with relief workers. These should be paid a salary by the week or month on a separate acquittance roll, and charged to a distinct sub-head, *viz.*, 'Petty Establishment.' Their salaries would be regulated to a certain extent by the ruling prices, but would not vary with slight fluctuations and might safely be left to the discretion of the officer in charge."

Speaking generally, I quite agree with this. There must, of course, be a special class, but the special class must be got, not for their own sakes, but for the sake of the famine labourers; but this special class will seldom come for anything like the wage proposed by Mr. Higham: how then are they to be got?

To give an instance. On the Ghaggar Canals there was no drinking water, and wells (unlined) had hastily to be sunk. The Deputy Commissioner with difficulty got hold of, and sent, well-sinkers; they were classed A, and got just the wage Mr. Higham proposes for his special class, but they ran away at once, and the water difficulty became most serious. We had to re-call the men, and pay market rates for well sinking.

Besides this, carpenters, blacksmiths, leather workers, thatchers and other artizans are necessary on all relief works; neither these nor quarry-men will join the special Class X proposed, yet

they must be got. Therefore do away with the special Class X, leave it to the officer in charge to put on what special workers he needs at such rates as are attainable, never putting them on for their own sakes, but only when necessary for the sake of the famine labourers. Whether these should be charged to "Petty Establishment" or to "Miscellaneous" is a matter of opinion. I incline to the latter. There would be a separate muster-roll for these men, *i.e.*, for such as were not paid monthly.

What is therefore recommended are Mr. Higham's three classes; only instead of calling them "diggers," "carriers" and "working children," it might be better if some other terms could be devised, for supposing the number in Z Class (carriers) is much in excess of requirements, it may be necessary to employ some of them to dig, but in this case they could only be required to do a task two-thirds of that of the task for the higher class.

The classes might perhaps be A, B and C—

A being for strong able-bodied men.

B for men less strong, women and children over 12.

C for working children under 12.

In the rare cases where women were capable of doing the task of A men, they might be classed as A. No children should be classed under C who were not able to carry a basket of earth. Families invariably marshal all the children they can get hold of, and even children of 3 and 4 are called seven. Clod breaking is a farce, which should be done away with.

Mr. Campion, Superintending Engineer, would exclude children under 14 from Class B, and make C Class include all working children under 14. I think on the whole, however, the 12 years limit will suffice.

Dependants.

2. Many officers are of opinion that dependants should not be mixed up with the workers.

Mr. Granville says: "I would insist on non-working children below the age of 7 being fed in kitchens, and propose that a child of over 3 years and under 7 should receive daily, half in the morning and half in the evening, 3 chattaks of flour made into cakes, and 1 chattak of *dál* or pulse (the *dál* being cooked in a little *ghi*). A child under 3 should receive half the allowance of one older, provided it has two teeth in either jaw."

Mr. Goument says: "The relief of dependants and small children should as a rule be in the hands of the Civil Department, and where necessary should be given in villages by means of kitchens. Dependants should be discouraged from coming to works as far as possible, but when their presence is unavoidable, they should be kept distinct from workers and allowed a fixed money dole on another muster-roll. The amount so disbursed should be adjusted periodically by transfer with the Civil Department.

"This would simplify works accounts considerably, and enable the officer in charge to see clearly, from day to day, how the progress of work compared with the actual expenditure on wages proper without risk of confusion.

"If dependants must be relieved on works, it will be sufficient to divide them into two classes, adults and children, and pay them as follows:—

If the price of grain is over 10 seers per rupee—

Adults	. . .	3 pice each.
Children	. . .	1 „

If grain is 10 seers or under—

Adults	. . .	4 „
Children	. . .	2 „

I agree with these recommendations, even with the scale of payments; the latter may be rather a rough and ready method, yet the simplicity is a great recommendation, and moreover it coincides closely with what was actually paid in most places in the Punjab, where wages were generally in pice and not in pies.

Scale of wages to workers.

3. As regards the scale of wages, I have recommended doing away with the special class, and so do most officers in this Branch.

If, however, it is to be retained, then the difference between it and the next lower class is much too small; the difference should be at the [illegible] and not 4, but I consider this class a [illegible] paragraph 4 of Government Secretary's No. 1188, [illegible] 15th November 1897 [illegible] not understood, as apparently [illegible] for W[illegible] H[illegible] items of special class is the same as that [illegible] in Appendix D of the Code, and that for Y Cla[illegible]

As to the wages of the other workers, Mr. Campion has pointed out that there is an inconsistency in the Code, in that Chapter VII most clearly calculates the wages in flour, while the Appendix does the same in grain. His report is put up for inspection and return. I think, however, that the loss of 4 seers per maund in grinding must be incorrect, though I should prefer to work by the price of flour, not of grain.

I am, however, of opinion, and the opinion of the officers generally is the same, that the scale proposed by Mr. Higham, supposing that the price of grain (in which case Chapter VII should be changed to suit), not of flour, is the standard, is fair and liberal. It is evidently *inclusive* of the addition of 75 or otherwise per cent. If this be regarded as fixed, then tables can be easily made out, showing the wages which will obtain with different rates of grain; in the one table the wages will be calculated to the nearest pice, and in the other to the nearest pie.

The consensus of opinion, however, and I most cordially agree, is in payment to the nearest pice, nor should wages be often changed; every change gives an opportunity of fraud and is therefore a great evil. I would not absolutely forbid payment of wages in pies, but I should strongly recommend the other, and I do not think the rate should be changed except the difference is a pice; while the rate of grain should be expressed in the nearest number of seers,—the lack of exactness is a far less evil than that of complexity with its opportunities of mistake and fraud.

The wages in pice in this case will be as follows:—

	6 seers.	7 seers.	8 seers	9 seers.	10 seers.	11 seers.	12 seers.
Class A, 19 chattaks .	13	11	9	8	8	7	6
„ B, 13 „ .	9	7	7	6	5	5	4
„ C, 8 „ .	5	5	4	4	3	3	3

Paragraphs 4 and 5 of Mr. Goument's report show the opinion (though I do not quite agree with it) of an able man who strains every point to gain simplicity, the lack of which weighed so terribly on us all in the last famine. Mr. Goument's scale, however, suits well, except where grain is 6 seers per rupee or dearer. As to the addition of 75 per cent. by which the grain rations in Appendix D were obtained, I agree with Mr. Clarke that to the ordinary rates which obtain during famine periods, 50 per cent. addition would more than cover the items other than grain; but seeing that grain is taken as the standard and not flour, and seeing also something extra is needed, as pointed out by Mr. Goument, I would accept the proposed wages on the following conditions, *viz.*, that the Local Government should have power to reduce the scale when considered necessary, because work was undertaken near the houses of the people.

I would not myself give the same wage to people digging a tank in their village, that I would give to people deported far off. It is very difficult to get the people to go a distance, whereas every soul in the village will work, however well off, on works on the spot. There should, therefore, be power to give the bare ration (*i.e.*, the value of the grain less the 75 per cent. addition) in case of village works, or such intermediate amount which the Local Government may determine.

This point has not been mentioned by any reporting officer, but I think it is important, as otherwise there will be useless expenditure on village works. (See too paragraph 3 of Mr. Higham's report on the works in the Bombay Presidency.)

Wages to dependants.

4. I have already stated Mr. Goument's opinion that dependants, if adults, should get 3 or 4 pice, if children should get 1 or 2 pice, according as the price of grain was more than 10 seers per rupee or the reverse. Taking Mr. Higham's proposal and making a table as before, then:—

	6 seers.	7 seers.	8 seers.	9 seers.	10 seers.	11 seers.	12 seers.
Adult dependants, 11 chattaks.	7	6	6	5	4	4	4
Children, 5 chattaks .	3	3	2	2	2	2	2

Col. S. L. Jacob.

5th April 1898.

This scale is more liberal than that proposed by Mr. Goument. It is in my opinion too liberal, especially as the trouble and fraud of relief works is very much mixed up with this matter of non-workers being paid in cash.

It has before been recommended that dependants should be, if possible, fed, not paid in cash. If paid in cash I recommended Mr. Goument's proposal, leaving it optional with the Local Government, if it considers it necessary, to pay the cash equivalent of 10 chattaks (20oz.) grain to adults, and 4 chattaks (8oz.) to children plus 75 per cent. I should not recommend a higher wage than this.

Male and female wages.

5. All are agreed that no distinction should be made between males and females other than that already stated, *viz.*, that the first class, Mr. Higham's Y Class, are mostly, but not invariably, men. Also children above 12 may be reckoned as adults. The only question is whether this age should be raised, as suggested by Mr. Campion; I would, however, leave it. The only thing is the officer in charge should determine the age from the size and build, for the parents declare that all children who can work are 12 years old.

Standard tasks.

6. Mr. Higham is of opinion that a standard task for diggers is not feasible, but that one for carriers is. I do not quite agree with him. He says: "It is affected only by two considerations, the variations in the length of lead and height of lift and general physical condition of the people." But there is another consideration, which is the density of the soil, which varies greatly. I have not before me the figures which I reported when Superintending Engineer, Western Jumna Canal, but the density of some soil on the Ghaggar Canal exceeded by about 50 per cent. that of other soil on the same canal. This is a very disturbing element.

There is another difficulty, and this is that the carriers were never really tried to their full capacity. In our famine works we never could get sufficient earth dug for the carriers, who were in consequence never tested. Never was there any difficulty in getting the earth carried away even though a few carriers had double the average task. In spite, therefore, of the fact that on the Jhelum Canal the work done by the carriers was only from 6,960 to 8,436, I consider the 10,000 standard of Mr. Higham as very low.

Watching some professionals lately, I found they carried 30,800 of Mr. Higham's units. I am, therefore, of opinion that, if a standard must be adopted, 12,000 would not be too high, but I would prefer leaving it to the Superintending Engineer in each case. What we have not solved yet is the difficulty of getting the earth dug. Given sufficient digging power, I am sure it would be possible to get much more carried than that which we have attained to.

Mr. Granville says of the Jhelum Canal workers, "*the same parties* when employed on piece-work *did twice as much* as when working on task-work."

Fines.

12. A matter of exceeding difficulty is what is to be done to those who do not complete the allotted task. Fines are very unsatisfactory. The difference between the amount which can be earned and the minimum wage is not sufficient to make lazy people work, and it is difficult to know what can be done in the matter. Moreover, it is in the matter of fines that much cheating goes on; a regular blackmail system was doubtless in vogue in places in consequence of this fine system.

Mr. Granville's paragraphs 18 and 19 may be read. I agree with him in thinking that the officers in charge of future famine relief, conducted on the task-work system, will have a great deal of office work in supplying answers to references on this subject of fines.

What then is the remedy? Mr. Granville suggests whipping in cases of contumacy in lieu of fining, and would give officers in charge this power. If, however, this were granted, it would not get over the difficulty. Sometimes thousands have to be fined; you cannot whip thousands.

I believe the only real remedy is piece-work, and that it would be possible to adopt piece-work to almost every condition of affairs: how was it that in the late famine, in spite of all rules and regulations, the very pressure of circumstances drove the officials to piece-work in spite of themselves? Of this more later.

Office work.

14. I also agree with Mr. Granville in saying that office work on a famine relief work should be cut down to an absolute minimum.

Sunday wage.

15. I think there is no doubt that no wage should be actually paid for the Sunday directly, the only question in my mind is whether there should be any indirect wage given, by adding one-sixth to the daily wage for the other days or not. Mr. Campion strongly recommends a wage for Sunday,—see his paragraph 5.

I have little better to suggest than Mr. Higham's paragraph 16; all I would say is that in the last sentence after the words "Sunday wage" should be added the words "by adding one-sixth to the wages of the working days." The difficulty in this matter would be also met by the piece-work system.

I do not think that Mr. Higham says anything about rainy days. Minimum wages might be given for these days when work is impossible.

I may mention here that, in the Punjab at least, the Mahommedan workers did not work on Mahommedan holidays nor Hindus on Hindu holidays; often the day before and the day after were kept as holidays also. The Sunday wage too was generally abolished, yet as a rule the people had plenty to eat, and kept in good condition; therefore on the scale of wages provided, there would, in my opinion, be no great difficulty in abolishing the Sunday wage.

Piece-work.

16. There is a universal consensus of opinion in favour of piece-work. I have not the least doubt that it is the system for the future. I would leave the matter with the Local Government. I decidedly agree that in the case of large works of public utility the piece-work system should most certainly be used; as to village tanks and *kutcha* roads, execute them by task-work by all means, but I object to these works altogether—to village tanks, because all in the village work at tanks, necessitous or otherwise. Open tank work in a village to-day at famine task-work rates, and the people in the village would turn out, while raised *kutcha* roads are worse than *kutcha* roads on the level of the country, except in rare cases, and when carefully maintained.

As to test-works, there is a difference of opinion. I prefer piece-work myself, and the danger pointed out in the circular could easily be met by making the rate sufficiently low. At the same time I think the task-work system will do well enough if—

(1) It is rigidly applied.

(2) Dependants are excluded.

(3) The labourers have to come some distance, *i.e.*, the work is not at their very doors.

This latter condition is essential, whether the piece-work or task-work system is adopted for the test The matter may well be left to the Local Government to decide.

Payments.

17. In the matter of payments Mr. Higham has stated everything that could well be said for and against the different systems. The matter might be left to the Local Governments.

Drafting labourers by rail.

18. All officers, of course, agree with Mr. Higham as to the desirability of giving greater prominence in relief programmes to large works of permanent utility. The difficulty, however, in inducing those in need of relief to travel long distances, and to stay away from their homes for long periods, will be very great.

Mr. Granville writes as follows: "In connection with the subject of drafting labourers to distant relief works by rail, I am of opinion that paragraph 164 of the Famine Code is too concise. I think that camps at suitable places on the line of rail should be laid out for the labourers, and that there should be provision therein, not only for feeding them, but for medical treatment, and if necessary segregation. That there should be a responsible European officer in charge to make all arrangements for receiving and despatching the labourers.

"That special trains should be arranged for with the local Railway Manager, and run so that the labourers may arrive in the rest camp before it becomes dark.

"That the labourers and their dependants drafted by rail should be fed, and not paid in cash; that a Native official of the rank of Naib-Tahsildar should accompany the labourers by rail, hand them over temporarily at the rest-camp to the officer in charge, and finally to the officer in charge of the relief work to which they are being drafted.

"I incline to think from my personal knowledge of the people that, if proper arrangements are made for hutting and feeding them on the way, and they are given a promise that they will be brought back to their homes at the close of the famine relief works, there will be no difficulty in inducing them to travel long distances by rail from one large relief work to another."

Mr. Granville's proposed arrangements are good, but I am not sanguine as to the result. I feel sure that in the late famine not 5 per cent. of the famine workers could have been drafted from the Ghaggar Canals to the Jhelum.

Let the matter be tried by all means, but most of the people hate to go away far from home, and they have great confidence in the kindness of Government, feeling sure that, if they will only starve a little, Government will give them work nearer home.

I would suggest that the lower Bari Doab Canal be aligned and then all famine labour to the west of the Sutlej could be drafted to that, or to the Jhelum, or when that is finished to the Sind Sagar Canal.

The lower Bari Doab Canal would also serve the Ferozepore district.

For the rest, east of Sutlej and, especially for the Hissar district, other schemes must be sought. I have gone into this matter more fully in my separate note on "General Principles of Famine Prevention and Famine Relief in the Punjab," which is also submitted herewith. I would hand over the whole of the Famine Relief Programme to the Public Works Department.

19. Mr. Higham is doubtless correct in what he states on this subject, if the opinion of those highest in authority in the Punjab be taken; but Mr. Clarke, Commissioner of Delhi, and myself as Superintending Engineer, Western Jumna Canal, who had most to do with the matter, stoutly maintained from the beginning that relief works generally should be managed by the Public Works Department, and those higher in authority gradually came round to the same opinion. I think now that it is practically conceded by all that this is the right method. The Civil officers will, of course, decide when test-works are required; they will, after taking counsel with the Public Works Department officers, decide when ordinary works must give way to piece-work and piece-work to task-work; and they must generally assume the position of friendly critics; they must also watch the physical condition of the people, and generally fully express their opinion on all questions not technical; but the Public Works Department, while meeting the wishes of the Civil officers in all these respects, will be entirely responsible for the details of management of the works. Only when it comes to petty scattered work, then the Civil authorities will assume entire charge of these petty works.

The relative position of Civil officers and Public Works Department.

The Public Works officials should be entirely responsible for the drawing up and maintenance of complete programmes of relief works; the Civil officials only need to be assured of the sufficiency of the programmes; Commissioners of Divisions will be responsible in this respect; a district is too small a unit for this purpose.

Small relief works need not be included in the programme, not because such will not be needed, but they can be easily started whenever the necessity arises. Each Deputy Commissioner will prepare his own lists when the time for such works comes to pass. All early relief will be by means of larger works under the Public Works Department.

20. Mr. Higham's final recommendations, paragraph 41, are excellent. I should have preferred that Mr. Higham's (*h*) should come after (*b*), so that the order may follow that of Mr. Higham's sub-paragraph (*k*). This sub-paragraph (*k*) is very good.

Mr. Higham's final recommendations.

In (*m*) I would change the second sentence thus: "When there is an Assistant Engineer or Upper Subordinate, by whom the work of officer in charge can be conducted, this will be the best arrangement, the special Civil officer, etc., etc."

Then at end of the sentence "the Superintending Engineer will decide this point."

In (*n*) I should omit the words "full pice wages and."

21. The following remarks are quoted from the report by Rai Bahadur Ganga Ram: "Lastly I come to the lessons learnt by serving on Famine Committees.

"I have come to the painful conclusion that the Government system of relief, as is generally understood, does not necessarily give relief to the necessitous. When famine breaks out, a rush is made on the part of Government officers to start earth-work, forgetting that there are hundreds and thousands of men and women who would rather die than go and do earth-work, and who feel the pinch more than the earthwork-doing classes. Although a variety of works is fully contemplated in the Government Famine Code, it would not be amiss to draw particular attention to the imperative necessity of starting other varieties of works as regular relief works, such as corn-grinding, cotton-ginning, wool-spinning, sewing, various processes of silk-working, etc. Under the auspices of the Famine Charitable Association I had the honour of serving on a Sub-Committee to provide relief to *parda* women, and we found that by incurring a loss of Rl per head, we could relieve deserving women of better classes by giving them cotton to spin, and by taking the yarn back at favourable rates so as to enable them to earn one anna per diem. I feel that these women had as much right to expect relief at the hands of Government as the women who did earth-work on relief works."

I presume that this is one rupee per month.

S. L. J.

These remarks are true, but apply more to Civil Officers' works than to those of the Public Works Department.

Appendix on the Accounts System of Famine Works.

Mr. Higham's proposal that the Public Works officials should only report the numbers of workers and dependants to the Civil authorities direct, and that the periodical returns showing expenditure incurred, etc., should be sent to the Superintending Engineer by Executive Engineers, and by the Superintending Engineer to the Commissioner, is excellent.

Forms 10 and 11 of the Famine Code are full of pitfalls and, do what one will, are utterly incorrect, because they had to be submitted direct by the officer in charge, and therefore exclude payments by the Divisional Officer, which were sometimes heavy. It is impossible for the officer in charge to submit correct returns of expenditure.

I would only like to go one step further than Mr. Higham, and, instead of having half-monthly returns, I would have monthly returns, and thus follow the usual accounts system of the Public Works Department, and then, I think, Mr. Higham's plan would be all that can be desired in its general conception.

The objection may be raised that it is too long a period to be allowed to elapse, that the expenditure being only reported at such long intervals would not give sufficient information, nor would it allow sufficient check. I think the objection is not valid. If the approximate expenditure is required, and this is all that is wanted in order to provide funds, etc., the Examiner can easily supply it from the Executive Engineer's application for letters of credit, while for check on rates, etc., trust more to inspection by responsible officers, and less to mere returns, and to the criticisms of whose who are unacquainted with the character of the works. Famine officers were greatly harassed by unnecessary questions during the last famine; this was due to the returns being too elaborate.

2. Three officers have written on the subject of accounts, *viz.*, Mr. Campion, Mr. Goument and Mr. Granville. There is nothing very special in any of them, though they are worth reading. Mr. Goument has proposed another form of works abstract. I think he is right in having a column for establishment; he calls it "Petty Establishments"; but what about establishment not petty? He would like to do away with Mr. Higham's columns for "Gratuitous relief;" so should I; but I think some such columns are needed, because some of the dependants may be charged in the Public Works Accounts. I would, however, change the head from "Gratuitous relief" to "Unremunerative payments," and add another column "Miscellaneous" to the 4 of Mr. Higham's between the 19th and 20th columns.

Opinions of officers.

All payments, then, which are unremunerative, could be placed in these columns: *e.g.*, payments on first arrival, payments during the time of labourers being drafted, expenses of moving by rail or road, wages for rainy days when no work is done, Sunday wage if any, etc.

Mr. Goument's columns 16 to end would be useful. Mr. Granville would like to do away with fines; so would I; but I am not sure it can be done (except as I said before by having piece-work only), and therefore would leave the columns as proposed by Mr. Higham, both the above officers object to the term "normal amount due," Mr. Higham's No. 10, as being unintelligible to many, and propose "amount due at class rates" instead. It is a small matter.

3. These are all the criticisms I am able to offer on Mr. Higham's excellent remarks on the subject. The reports of the officers mentioned can be seen if required.

Note by Colonel S. L. JACOB, R.E., *Chief Engineer, Public Works Department, on general principles of Famine prevention and Famine relief in the Punjab, dated 6th January 1898.*

It is well known that prevention is better than cure, and I think the best way to arrive at the way to amend the Famine

General proposition.

Col. S. L. Jacob.

5th April 1898.

Code is to work from famine prevention to famine relief, and to ascertain the action to be taken at each step.

Famine protection beforehand, and the condition of the Punjab.

2. An immense deal has been done in the way of famine prevention, so much so that the famine of 1896-97 was very light in the Punjab as compared with other Provinces and compared with former famines in the Punjab, though, as far as I have been able to ascertain, no worse drought has occurred in the Punjab for the past 50 years. This difference is due, in far the greatest measure, to irrigation works, but in part also to railways. Also the scarcity was met at the beginning with an organization far more perfect and incomparably superior to anything there was before: hence the suffering that ensued was, comparatively speaking, light.

The Rohtak district has always suffered much in times of famine, and especially West Rohtak. This time West Rohtak did not suffer at all, owing to the irrigation on the great Bhiwani distributary opened three years ago.

East Rohtak had the benefit of the new Bhalot distributary; the unprotected part of the Rohtak district was, therefore, small and the suffering light.

If the Ismailia branch of the Rohtak distributary be made, the unprotected part will be further reduced, and even in such seasons as we have passed through, this district will cause no anxiety.

The Karnal district suffered somewhat, but very little to what it would have done had not the Sirsa branch been made. Consequently the suffering was mainly in the East Nardak, for which the Nardak distributary has been made. With this complete and the Sarsuti Canal somewhat more developed, Karnal will be secured against all ordinary famine years. This being the case, then practically from the Jumna to the Sutlej there only remains part of the Hissar district unprotected. All the other districts in this area are so protected by canals, by well irrigation or irrigation from streams from the hills, that they are never likely to cause much anxiety. The Hissar district is the one which in all the Punjab is most likely to give trouble, yet the distress there this last famine was immensely alleviated by the irrigation in the Fatahabad and Sirsa tahsils on the Sirsa branch. Since then during the famine the Petwar distributary has been completed and the Ghaggar Canals have been made. These will greatly improve the condition of the Hissar district in another time of drought, and, if the Petwar distributary irrigation is extended in a way I have proposed, and still more, if a distributary can ever be made from the Butana branch, as I have suggested, to irrigate the portion of the Hissar district between the Petwar and the Bhiwani irrigation (there are difficulties in the way of this, but they are not insuperable, and from the engineering point of view the scheme is simple), then the unprotected area of the Hissar district would be likely to give little trouble, though it will be the worst of all the canal tracts in this respect. From the Sutlej to the Punjab north-west boundary famines are not likely to be severe. The country between the Sutlej and Beas is greatly protected by wells, etc.; the Bari Doab has wells and streams in the upper part, the Bari Doab Canal in the centre, while the inundation canals protect the tracts near the rivers and the rest has hardly any population.

The Rechna Doab is likely to be the acme of fertility owing to the Chenab Canal, while the upper part of the Doab has many wells.

Next to the Hissar district, the Phalian Tahsil of Gujrat appears to have been worst, but, in future, the work of the Jhelum Canal will be in progress in the Chaj Doab, or else the Jhelum Canal will be in operation and irrigating. In either case, and bearing too in mind the immense production of grain that there will be in future in the Rechna Doab, there is likely to be very little in the way of famine either in the Phalian Tahsil, or in any other part of the Chaj Doab.

The rest of the Punjab to the west of the Jhelum is well protected by irrigation of various kinds, or else it is almost uninhabited.

Famine prevention in times of drought.

3. It is, therefore, believed that, in future, unless such a drought occurs as is beyond all precedent, or unless something extraordinary causes the canals to be closed, that famine in the Punjab is not likely to be severe, especially if the works suggested above, and some others to be yet mentioned, should be carried out.

If this be correct, then it will very seldom be necessary to carry on famine relief works at all in the Punjab. Mr. Higham has dealt with this matter in paragraph 39 of his report. What he has said is very good, but I wish that he had given the matter greater prominence, for it, to my mind at all events, as regards the Punjab, is the most important point of all the matters dealt with.

Mr. Higham's remarks.

4. Mr. Higham writes as follows (the *italics* are mine):—

"In paragraph 136 of the Report of the Indian Famine Commission, it is observed that, when distress is comparatively light, and 'only amounts to severe scarcity, the Government will commonly find it sufficient to enlarge its ordinary works, so as to offer employment to greater numbers than usual, *but without any change of system*; and this with the addition of some help in the villages to those incapable of work, will probably enable people to tide over the season of distress.' By this is meant that ordinary public works may, under the conditions stated, be carried out in the usual manner, through the agency of contractors, *and that operations may be expanded when it is considered necessary* to afford employment on such works to greater numbers than would otherwise be employed. The prosecution of ordinary public works on the usual Public Works system is contemplated in most of the Famine Codes, but an expansion of these works without any alteration of system so as to obviate the necessity of opening, more or less, *useless* relief works, *is at present seldom permissible, however strong a case may exist.*"

Famine Commission recommendations upset by Financial rules.

5. This is very true, and the recommendation of the Indian Famine Commission above quoted, and what is said on the subject in the Famine Codes has been made a dead letter, as Mr. Higham points out, owing to the method of financing and of arranging budget grants. What is actually done in practice is just the very reverse of what was recommended by the Famine Commission and contemplated by Famine Codes.

Instead of expanding ordinary public works to prevent severe scarcity becoming famine, what is actually done is at once to restrict expenditure on such works. What is practically said is this, "we will give you nothing, if all you want to do is to prevent scarcity becoming famine, but declare 'famine' and we will give you anything you like."

The officers are helpless, they see the severe scarcity, they see too that expansion of ordinary work would do all that was necessary to meet that scarcity, if supplemented by village aid to the dependants, but this may not be done. So famine work has to be started with all its disadvantages, its demoralizing effect, the roguery (see paragraph 23 of Mr. Higham's report) and the other evils which it entails, all of which might in many cases be prevented, if only that which the Famine Commission and Famine Codes enjoin were allowed to be done.

I will give instances.

At the beginning of the cold weather 1896-97, when the question of famine in Hissar was mooted, and the question arose of the construction of the Ghaggar Canals, both Mr. Clarke, Commissioner, Delhi Division, and myself (then Superintending Engineer, Western Jumna Canal) recommended that the canals should be done by ordinary contract. We both felt sure, and I most certainly believe still, that this would have met the case perfectly, but it could not be allowed.

The same thing occurred with the Nardak distributary. As to this I have no doubt whatever; I feel absolutely certain that this work done as an ordinary work would have done all that was necessary, but without work of any kind in that tract the suffering would have been great. The word, however, was 'famine work or none,' so it had to be famine work.

I am convinced too from what I have seen and heard that it was the same as to the other works in the Delhi Division, and also as to the Jhelum Canal Works.

The reasons for task-work as given by the Famine Commission did not apply in the Punjab, 1896-97.

6. The reason given in the Report of the Famine Commission for their system in contrast with the system of ordinary Public Works was as follows:—"We are of opinion that experience has proved that the portion of the population not accustomed to work for wages on public works will not spontaneously seek such employment until forced to do so by want, and that it must be anticipated that many will be reduced in strength, and at first at all events incapable of earning a livelihood on public works, assuming that the work to be done to earn a livelihood by every one must be that of an able-bodied labourer."

There is somewhat of a fallacy in the last assumption, for an able-bodied labourer can earn a good deal more than a

livelihood at ordinary Public Works rates even in times of famine. He can support himself and one or two others.

But leaving this on one side, the famine workers in the Punjab were not of the classes unaccustomed to hard labour. As far as I know, weavers, shoe-makers, tailors, embroiderers and similar sedentary workers and all artizans were very few in number or absent altogether. The mass of the famine workers were *kamins*, a number were *zamindars* and others accustomed to hard work, with a good many nomads. Moreover, they were not reduced in strength on arrival at the work, except in the case of certain from the Bikanir State.

No doubt, from all the country around the weakly were brought in to swell the number of dependants, but, generally speaking, the mass of famine workers were strong and able-bodied, quite capable of doing a good day's work. It is, therefore, maintained that, if only paragraph 136 of the Report of the Indian Famine Commission had been carried out, instead of being made a dead letter as pointed out by Mr. Higham, the necessity of starting work under Famine Code Rules in the Punjab would not have arisen.

The most urgent need as regards Famine Rules.

7. The most crying want, therefore, in the Punjab at all events, is such a revision or modification of financial rules, that directly there is a fear of famine in any district, instead of stopping ordinary works, all ordinary works of a nature suitable, *i.e.*, all which involve much coolie labour and little skilled labour, should be at once developed, so that, if possible, famine work proper may be obviated.

At present the financial rules utterly block the way, and in addition there is the possibility of the cry, if famine is staved off, that there never was any fear of famine at all.

Let it be clearly understood that there is immense gain if, by any means, the necessity of famine work proper can be prevented, then this of itself will, I think, do more in the right direction than all the rest of the matter put together, certainly as far as the Punjab is concerned I look, therefore, at Mr. Higham's paragraph 39 as the most important in all his valuable report, only I should have liked to see it begin paragraph 1 instead of being paragraph 39, and I should have liked him to have devoted several paragraphs to this most important subject.

Programme of relief works.

8. No doubt less care has been taken to provide suitable programmes of relief works than was desirable.

Mr. Higham discusses the point in paragraphs 27—31. His Class I is, as he states, the best of all for the purpose. This consists of productive public works already in progress. Generally in the Punjab there will be one such canal project in hand. The Jhelum Canal will probably be the first, then the Lower Bari Doab, then the Sind Sagar. These will be very useful within certain limits, but the difficulty of getting the people to go long distances will be great, and I think that a great many who should go will not do so. When the Ghaggar works were drawing to a close the question of railing the famine labour to the Jhelum was mooted. The labourers were told that they would be railed there free of charge, would be fed and cared for *en route*, brought back at the end, etc. With a few exceptions they all said they would not go.

There is a great unwillingness on the part of the mass to go more than two or three days' journey from their homes, and they are strongly impressed with the idea that, if they hold out long enough, they will be provided for nearer home. The consequence is that they will refuse to go in the hope that other arrangements will be made. If Government hold out long enough they may be made to go, but they will suffer much first: therefore, in all probability, Government would give in first and provide the nearer works, which the people crave.

For this reason, it is desirable to have a good programme of works fairly widely spread over the parts liable to famine.

The best kind of works for famine prevention or relief.

9. Undoubtedly the best kind of works are irrigation works, but irrigation projects are just of the kind which should not be got up hastily. They require more survey and levelling than other projects, and they are often complicated by the question of existing rights, as well as other difficulties; therefore such projects have to be well thought out. If a good programme of famine works is to be drawn out, it will be necessary to take up the matter thoroughly and spend a certain amount of money and pains beforehand in getting up suitable projects. It is too late to do this when the famine is at hand.

It is believed that a number of minor projects in connection with hill torrents, such as those in the Umballa district and other parts, inundation canals from the rivers, etc., are possible; that some of these might be remunerative, while others would not be sufficiently remunerative to make it worth while to undertake them in an ordinary way, and yet they might be most advisable for the prevention of, or the dealing with, famine.

Such minor projects would then in part belong to Mr. Higham's Class II, while the others would be intermediate to his Class II and Class III, for they would be to some extent remunerative though not sufficiently so to yield a full return for the capital expended.

Proposed alteration in financial rules as to portions of capital work done for famine relief.

10. While upon this matter I desire to bring to notice another point in which the extant rules of finance are very much against the best forms of relief. Works may be taken up under Mr. Higham's Class 4 (indeed a Class 5 may be added, *viz.*, works of no use to any one, but merely undertaken to provide work. I could, if necessary, mention such works undertaken in the Punjab) and charged off finally to 33—Famine Relief. This is very common indeed, but now suppose instead of works of little utility, or even useless as above, it is desired to do some work in connection with a project which has a capital account, then the whole normal cost of this work must be written back from 33—Famine Relief to 49—Productive Works not charged against Revenue.

Now there are many works in connection with the Productive Works which, though desirable, are not worth in full their cost at normal rates. Naturally the officers will not recommend such works to be undertaken if the whole normal cost is to be charged as a debit for ever to the capital account, whereas, if the capital account were to be debited with three-fourths or one-half only of the normal cost, the case could have been different. I could have proposed such works during the last famine, but was prevented by the rule mentioned above.

Doubtless the same objection would be raised to the alteration of this financial rule which Mr. Higham, at the end of his paragraph 39, states as a danger if the financial rules are altered in another particular, but the answer that he gives in the last sentence of that paragraph can be given to this objection also. Thus with relaxation of financial rules in this particular respect further possibilities in relief works could be opened to us.

Railways, roads, etc.

11. Next to irrigation works the best works would seem to be railways, which it is intended to make before long. Such works will be of great utility, as pointed out by Mr. Higham.

When it is intended to make a metalled road as soon as funds are available, the same remark applies, but otherwise roads are very unsuitable for relief works, for, in many cases, embanked unmetalled roads, on which it is impossible to spend a fair amount on main' nance, are worse than mere tracks at surface level.

There will be of course a certain number of works under Class III of Mr. Higham's classification which the General Branch can arrange for, but these will be much more limited in amount than the Irrigation Branch can arrange for.

Steps to be taken at approach of famine.

12. Now, supposing an adequate programme of relief works is ready, and there is fear of famine, then it would be as well to get as many of the regular labouring class away from the parts where there is scarcity to any large canal project that may be in hand as possible. They might be helped to go there, their fares being paid. Their absence would relieve the scarcity, while their earnings would in part return to their own district in the way of provision for wives and children.

The next step.

13. The next thing would be to open out other works from the relief programme, nearer the affected portions, though not necessarily at the very doors, but rather the reverse.

In these matters all works would be in the hands of the Public Works Department. It is, however, essential that there should be close communication between the Civil officers and the Public Works Department, and that they should work hand in hand. The Civil officers would watch the people in the affected districts closely, but, as long as the ordinary works met the necessity of the case, no more would be needed; poor-houses or some such things in addition might, if desirable, be provided also, but the great thing is to provide a sufficiency of work for those willing to work.

All these ordinary works should be done on the petty contract basis, *i.e.*, no contractors should be employed who sub-let their work to smaller contractors, therefore usually only contractors having less than 200 labourers each would be employed, and the officers dealing with their usual men

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should be able to insist on their employing all who come to the work as long as they are fairly able to work. No good Sub-Divisional Officer should find any difficulty in this.

A great deal will have been gained if the necessity for famine relief proper be obviated.

If the distress cannot be met by ordinary works.

14. If, however, it is found that the distress is too severe to be met by ordinary works (the Civil officers, who have been watching the condition of the people, would be the best judges as to this), then surely the next step would be piece-work, and not to go at one bound from ordinary works to the complicated task-work system of the Famine Codes.

In paragraph 26 Mr. Higham says, "there must, however, be some intermediate stage between that at which it is necessary to invite all that are in want to the works, and to give to each a wage that is but a thinly disguised form of gratuitous relief, and that at which those who can work can earn enough by their ordinary occupations for the support of themselves and of those who are dependent on them."

This is true, and therefore, when ordinary works no longer suffice, piece-work should most certainly be resorted to, and task-work only where piece-work is inadequate. All this is just what has been recommended by Mr. Higham,—see (*k*), page 27 of his report. "The systems that may be adopted on relief works may be classed as follows." In this he gives the gradations and modifications from ordinary works proper to task-work on full Famine Code principles. As the distress deepens, the Civil officer's work will increase, his great object will be to see that the distress is sufficiently met, but that no more expenditure is incurred than is necessary, but the actual management of the work will be left in the hands of the Public Works Department until village works are undertaken, in which case the district officials will manage these themselves.

Co-operation between Civil and Public Works Department officers.

15. At every stage, however, the Public Works Department must be in close communication with the Civil officers, and it is on the latter that the responsibility of seeing that the distress is sufficiently met will devolve. They will also watch over the sanitation, the food and water-supply, the wages earned, the Sunday wage question, etc. With tact on both sides the two Departments will be able to work together to the best advantage.

Agreement with Mr. Higham.

16. In all this I agree perfectly with Mr. Higham, only I have worked it out for myself in another way, and somewhat more stress is laid on certain points than is done in his report.

Except that extra stress is laid on certain points, there is nothing that Mr. Higham has not already stated, with the single exception of paragraph 10 of this note, in which I recommend that, in certain cases, works which form part of a system which has a Capital Account may be done without charging that system with the full normal cost of these works.

Final proposals.

17. The summing up of this note is as follows:—

(1) To take more pains with the programme of relief works and to be willing to spend money in getting reliable schemes worked up fully beforehand, especially irrigation schemes and schemes dealing with drainages.

(2) To get such financial rules made as will allow of the expansion of ordinary works when scarcity occurs, so that famine, if possible, may be prevented.

(3) To get the financial rules so altered that it may be possible, when circumstances so require, to spend famine money (33) on works which have Capital Accounts, without charging the whole of the normal cost to the capital.

(4) To seek always to prevent famine by expansion of ordinary works.

(5) Only to resort to piece-work when ordinary works are found inadequate.

(6) Only to resort to task-work when piece-work having been tried is found inadequate.

(7) All works to be under the supervision of the Public Works Department, except village work, but loyal co-operation with the Civil officers is essential, and the Civil officers to decide when ordinary works will no longer suffice and piece-work is to be introduced, also when task-work is to be substituted for piece-work. They will also decide when the reverse process is to be carried out.

The Civil officers will also inspect the works to see if the food and water-supply is sufficient and of good quality, that the sanitary and medical arrangements are sufficient. Also, if there is any defect apparent in the methods of payment or in the care for the labourers, they will report on the matter.

18. The details with regard to task-work will be taken up in a separate note.

(*President.*)—You are now Chief Engineer in the Public Works Department, Punjab?—Yes.

What office did you hold during the famine?—Superintending Engineer, Western Jumna Canal.

What position did that give you with regard to famine relief work?—The heaviest works in the east of the Punjab were all under me; the whole of the Delhi Division.

None outside that?—No, not outside the Delhi Division.

(*Mr. Higham.*)—All the irrigation works in the east of the Punjab were under your guidance?—Yes.

And since then you have become Chief Engineer in the General Branch?—Yes.

In that capacity you have had something to do with the reports on relief works by General Branch officers?—Yes. General Branch works were all stopped and completed before I took over, but I have seen the reports of this Branch.

The operations of both branches have been brought under your notice?—Yes, more or less.

Have you seen the questions that were circulated?—Yes.

When failure of crops has caused great rise of prices and expectation of famine in a district, but its circumstances are such as not to justify the opening of relief works, or even of test works, is it good policy to at once arrange for special employment of labour by the Public Works Department on ordinary terms? Would such action enable large numbers of labourers to retain longer their independence and their full working power, and in that way would it stave off the time when large numbers become so pinched that private charity and mutual help cease, and famine relief becomes a necessity?—I should say yes, certainly.

I understand from your note that the main point you wish to insist on is that works carried out by the Public Works Department under ordinary terms would have given all the special employment necessary throughout the whole term of the famine?—Yes, I believe so, on the supposition that it was carried out as we carry them out in the Irrigation Department, by petty contract and not through large contractors.

What do you call petty contractors?—A petty contractor is one who deals directly with the labourers that work under him. He has no intermediary between himself and the labourer, and as a rule he has no more than 100 men under him. If you call for tenders and you give a contract to the people through tenders those people never carry out the works themselves, but they sub-let their contracts to a number of petty contractors who are the real men who do the work.

In paragraph 3 of your first note and in paragraph 5 of your last note on the general principles of famine prevention, you have stated that instead of expanding public works, public works were contracted on the approach of famine. Where and to what extent were they contracted?—I will give you an instance. We were finishing up the Petwar Rajbaha when famine came on. I meant therefore to move the men from the Petwar Rajbaha to the Hansi remodelling scheme. That was stopped. Afterwards it was taken up as a famine work at the end of the famine.

Why was it stopped?—Because our funds were cut down.

Were your funds reduced or were you refused an increase of funds?—Well, I don't think there was any actual reduction, but I should have got a considerable deal more if it had not been for the famine.

There is a certain Budget programme for use, and when famine comes on, works that will not be of any assistance in relieving famine, public works of that character will only be cut out of the programme so as to give more money for relief purposes. I want to know if any works were cut out in that way?—There were those on the Nardak Rajbaha, also several other schemes which I was told it was no use to send up because they could not be sanctioned.

Within the grant of the year?—Yes.

That would not be contracting, but simply a refusal to expand operations?—We had men actually employed, and when famine came on we were unable to go on employing them.

Had you a grant available?—We had a grant to a certain extent.

Was your grant cut down?—I think I am right in saying there was some reduction of grant.

I suppose your complaint really is not so much that there was an absolute reduction of grant as that you did not have an additional grant given you?—Yes, that was the principal thing. There were many schemes that I should certainly have carried out in the ordinary way if there had not been tightness of funds.

There are conditions to your grant?—Yes; but I should have got those conditions fulfilled. Always got money in the past.

The particular case you bring forward is that of the Ghaggar Canal?—Yes. I believe if I could have worked on the lines I should have liked to, I could have relieved distress to the full extent that it was relieved and have done many more useful works at the same time.

There was no provision in the budget programme for the year for the Ghaggar Canal?—No.

When proposals were sent up for it funds were given on the condition that works should be carried out on relief principles?—Yes, quite so.

And your complaint is that you are not allowed to carry them out on other principles?—Yes.

The question of carrying the work out on piece-work was considered when Sir Dennis Fitzpatrick visited the works in January 1897?—I don't think the question was discussed then. Before we commenced it the question was discussed, and it was decided that it must be carried out on Famine Code lines. I was not at the discussion when Sir Dennis Fitzpatrick came down.

It was not considered possible then under the orders of the Government of India to carry it out by the piece-work system?—Yes, Sir Dennis Fitzpatrick consented to a very small portion being done on piece-work, but that was all.

Do you know the Resolution of the Government of India on the subject? This was issued in February, I think, sometime after your Ghaggar works were started, but the question of allowing some latitude in carrying out these works either by task-work or piece-work or even under the ordinary departmental system is considered in this?—I do not remember ever seeing this Resolution.

I called attention to paragraph 7?—I never saw this.

Will you please read paragraph 7?—It was with the greatest difficulty that we got permission just at the close of the famine for some piece-work on the Nardak, and when I proposed to the Civil officers to try piece-work in the Hissar district Captain Dunlop-Smith said, "Oh! it is no good, Government won't sanction it now; besides it is too late, we have come nearly to the end."

This Resolution does not meet all your wants?—It does not give you all the freedom you want?—Yes, it would if there were funds; but it is no good having permission if you have no funds to do it with.

It has nothing to do with funds. This Circular lays down that when distress is not so acute as to drive a very large proportion of inefficient labour on to works, relief works may be carried on on the system of payment by results? I think that would answer the thing perfectly. It is what I wanted. But there was no such permission as that given in the Punjab.

At the time you started the Ghaggar Canal it was proposed by His Honour the Lieutenant-Governor to open the Ghaggar Canal as an ordinary public work in the way you now suggest, and the Government of India said that if money was given for it it must be carried out on famine relief principles. The effect of this Resolution is to bring within the Resolution the famine relief principles of the construction of works on the departmental system of paid contract, provided that the distress is not so acute as to drive a large proportion of inefficient labour on to the works?—That is all I ask for in that respect.

I think advantage of this Resolution was not taken because it was issued rather late in the day, and the Provincial Report tells us that Sir Dennis Fitzpatrick thought it was essential to give at least a trial to the Code system as being the outcome of previous experience. What do you think the advantages of working on this petty contract system are as compared, not with task-work, but with the rational system of piece-work, dealing direct with workers?—Anything that will reduce the amount of establishment and in that way prevent cheating I believe is a great point.

For your establishment you would substitute your petty contractors. Your petty contractors would be practically your establishment, only they would look after their own interest. But is not there danger that in looking after their own interest, they will not be looking after the interest of famine relief?—There is that danger. What I want to explain is that the European in charge must have everything under him as far as possible. Under the petty contract system a European can see to all. Under any other system he has to trust so much to his understrappers, and all subordinate establishment is notoriously corrupt.

But he has to trust very much to contractors?—He has of course: there is a difficulty this way, but I think there is far less difficulty that way than there is in the other.

Would you propose that a contractor should make his own terms with the people?—No. When I had many works I had contractors altogether under my thumb. They were contractors and yet they were half servants. I told them what rates they had to give to those working under them and I saw that they gave these rates.

Was this when you were working with ordinary public works?—Yes. We always looked to the rates the contractors paid to their men.

You never were able to satisfy yourself that they got them?—They always got the rates, but the contractors occasionally cheated them in measurements.

There is no reason why a contractor should go out of his way to treat people fairly?—You have a large number of them, and where some of them do not work fairly and properly you get others that do. Those who do not act well you turn them out and put on others in their place.

If you did not work by contract I suppose you would propose to work by piece-work?—Quite so.

In which payments should be made solely with reference to the quantity of work done?—Yes.

In working in that way would you propose any limit to the amount a man can earn?—No, not usually, but I would propose limits in this way that I would alter my rates accordingly. If I saw people earning a great deal I would cut down rates. You can modify piece-work to any extent you like by diversity of rates.

Would you have different rates for the weakly and able-bodied?—I would draft them off to different parts of the work and give them different rates. I would give good workers hard work and put weak workers on light work.

You have to consider that on the Punjab relief works you had very much larger establishment than was to be met with elsewhere. Your works were all directly under the charge of Engineer officers or very experienced Upper Subordinates. In some Provinces the works were in charge of Civil officers—Tahsildars. They were the responsible men in charge of works, and it was only possible for the Engineer establishment to go round to these one after the other and see that they were being worked on proper lines?—I don't think my remarks would hold in these cases.

You postulate certain discrimination on the part of the officers in charge?—Certainly.

You say somewhere that there is a universal opinion in favour of piece-work?—So far as I am aware there is.

You mean among the Public Works men or among officers generally?—I mean Public Works men.

We had Mr. Floyd up yesterday, and he said that he thought that if piece-work had been introduced on the Ghaggar Canal they could never have got through the work. People would never have come to it?—I don't agree with him.

Another officer, Mr. Wakefield, objected to piece-work because he said there was no security. Payments made to a piece-worker would not be properly distributed among his associates as they were under the system that was actually followed?—Well, there is the petty contract system. This is why I prefer the petty contract system to piece-work, because both are really petty contract, only in one case you work with contractors you know, and in the other you choose new men and make them practically contractors.

The gangs you pay are heads of a family really?—When the man paid is actually the head of a family then it is all right, but it is not so always.

There is a third system which is that which has been followed in the North-West under the name of piece-work:

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it has been piece-work without any minimum wage. If the task was not done, nothing is paid either to the digger or to the woman. What is your view about the minimum wage paid in task-work?—I am inclined to think that the minimum wage is rather too high.

I suppose you must have it. You don't think it should be abolished?—No.

You think it might be reduced?—Yes, to the penal wage.

Do you think it might be reduced below what is actually necessary for subsistence?—The difference between it and the full wage is so small that a great many prefer to get the minimum wage and do little work rather than work hard for a full wage. I would therefore lower it.

Regardless of the fact that it may not be enough for a man's subsistence?—Yes, because you want to make it really penal.

Do you think piece-work or contract work might be worked concurrently with the system of task-work for those who are not able to work by contract?—Yes, I think it might, only then I would keep people apart and not have them in the same camp.

Do you recognize the necessity for keeping certain lengths for task-work?—I don't think it would be necessary for the people we get in the Punjab; but I quite admit theoretically the necessity, though I have not seen the necessity in pratice.

Now in regard to the classification of workers which you deal with in your second note, I understand you to agree with what is proposed by me, except as regards special class workers. Apart from that you accept that classification?—Yes, apart from that.

You agree that it is not necessary to give different wages for men and women?—Yes, I agree to that.

That is the general opinion of all your officers?—Yes.

(*President.*)—What is the object of it?—To simplify, because the complication is frightful, leading to extra establishment and each extra man is an extra cheat added.

How does the abolition of distinction between men and women simplify very much?—Because now you have classes of men, women and children. That would be done away with.

You always have to keep a record of men, women and children on the work?—I would prefer not to myself, just because that means extra establishment and extra cheating.

As regards the wages you propose at the bottom of page 45?—All I propose there is that it should be in even pice, because then I think people know much better what they are going to get than when wages are in pies.

You make some remarks in paragraph 6 about the task for a carrier. You say that some allowance must be made for variations in the density of the soil. Have you made any actual observations to show that such allowance is necessary?—We weighed a certain amount of cubic feet of earth. Unfortunately the figures were left in the Western Jumna Circle office and when sent for could not be produced. I left them there. But there was as much difference as 2 to 3.

Have you ever taken observations on the works and seen whether people where they have got a very dense soil carry a smaller quantity than where they have a light soil?—No, I have not tested that. My experience was that they carried very much the same in cubic feet whether the soil was light or heavy on relief works. The reason of that was that they were not working up to full capacity.

As to relief programmes, what alterations would you propose in the present Code rules on the subject?—I think you must be prepared to spend a good deal of money in making out schemes. Irrigation schemes cannot be made in a moment. They require the co-operation of Civil officers and are often very complicated as regards land revenue questions. They take a long time to make out. You must allow a good deal of time for them and spend a good deal over them, and give necessary establishment for them. We only made out our programmes for those works which might be accepted independently of famine.

Do you think any relief work programmes could be made out in the General Branch?—Well some, but not to any large extent. In the General Branch roads are the chief thing, but roads are miserable things for famine works. A road is all very well if you are going to make a metalled road. Then it is all right. But don't make *kutcha* roads as a famine work.

Are there any drainage works which could be taken up with advantage?—I dare say there are some, but I cannot say I know them.

Your objection to tanks, that they are practically for one village only, does not seem to me very conclusive. Every work is for some tract only?—I have another objection and that is that everybody there turns out to work whether needy or not.

The fact that it is one village only does not seem to me of much weight?—The fact is they won't allow people from other villages to come there, and they keep it for themselves. Even if many tanks are dug still many villages are left out. Another thing is I am an utter disbeliever in the measurements of those tanks.

(*Mr. Holderness.*)—Did you see tank work in Hissar?—Yes, some of it I did.

What was your opinion about measurements. Did you test them?—No, but I inquired about their measurements and found that there were no accurate means taken beforehand to measure the work when it should be complete.

(*President.*)—In some parts of India tank clearance work was done under the regular *takavi* system?—I never saw any of that.

You say that you would have expanded ordinary public works, but would you have thought it necessary to raise your rates with reference to prices?—No, certainly not. I should probably have lowered them.

If you kept to your old rates or lowered your rates I suppose no doubt a man who went on to work would be able to earn enough for his own subsistence, but do you think he would earn enough for his dependants and non-working children?—I think he would.

When the price of grain doubled were rates the same or lower?—When we had piece-work on the Nardak we were working actually below ordinary contract rates.

Do you think they could support their dependants without these rates?—They seemed to do so; but they were very hard put to it when we stopped their works.

The question is, if distress is really severe whether they can support their dependants. You imagine that they could?—I think they could, because I imagine they have a very large margin in ordinary times.

Then you say that the Local Government should be allowed much more latitude than is allowed by the Code?—Practically I think the Local Government should always be free to cut down. There is little latitude in the Code but changes were often made by force of circumstances.

I see you approve of the rule of treating as adults all people 13 and upwards?—Yes.

Do you think that is the best line you can draw?—You see you have no real mode of telling what a person's age is. We have to draw our own conclusions.

You recommend 13 and upwards as adults and 7—12 as working children?—Yes.

In your note of January 1898 you approve of Mr. Goument's proposals that the rates for dependants should be three pice each adult and one pice each child if the price of grain is over 10 seers per rupee, and if 10 seers or under four pice and two pice?—Yes, for simplicity sake.

It seems to me Mr. Goument and other Engineers are rather influenced by their desire to have no dependants. These rates seem to me dangerously low?—No doubt there was great advantage taken of this dependant wage, hence the great desire all had to get rid of dependants. Mr. Goument's rates are not much too low.

I suppose these people are hard up?—More or less hard up, but in many cases they are brought from families who could support them. To be fed as dependants on works either in cold or hot weather is pleasant enough to induce people to come on without their being very hard up, as I found that whenever a holiday occurred men would go away for four or five days at a time. I don't think the men we had were so hard up, because they could afford to take several days' holidays.

Anyhow, whether some of these dependants are more or less imposters or not, in fixing the rate you have got to fix it for people generally in want. It seems to me this rate is low. Looking at it from that point of view, not with a wish to drive off dependants, but with a wish to provide dependants with a proper rate of subsistence, do you think this rate is enough?—If people were perfectly honest one would say it was not enough, but we got over twice as many as are properly speaking dependants.

By cutting down wages to obviate that, you fine the really dependent, but that is a principle by which the innocent suffer with the guilty?—To some extent this always happens. You see what they want to do in so many cases. A man

stays at home and sends all his weakly ones to the works to get rid of them and to get them food. They come there and then a great many difficult questions arise. You must spend a good deal of useless money or you must have a certain amount of hardship in certain cases. I said I preferred to have them fed, and where food was given instead of money the numbers dropped down to a fraction of what they were before.

If no addition is made to wages to cover the Sunday wage you would give the minimum wage?—Yes.

You would give the minimum wage for rainy days when work is stopped?—Yes.

(*Mr. Holderness.*)—These wages which you have worked out on Mr. Higham's note in pice, how far would they correspond with rates of wages paid during the famine in the Punjab?—I see the Provincial average for men, women and children works to R0-1-6, and apparently if we take one man, two women and one child on the 10-seer basis, your rates would give approximately this?—They would very nearly correspond.

Apparently these rates would not involve very great change in what was paid?—No.

Then as to drawing the line at 12 for children, can a child over 12 do an adult task (carrier's task)?—I think he could do any task that is proposed here without any difficulty.

Classing a child over 12 does not make a difficulty when you come to fixing the task?—No, I don't think so.

With regard to tanks it has been said that by cleaning out a tank you prevent it from holding water. Is that the case?—In certain cases it is. The tank becomes water tight as time goes on, and when you dig it out it gets less water-tight.

Do you know whether that is the case with reference to the Hissar tanks?—I think villagers do know when that will be the case and generally avoid damage in this way.

You are not very sanguine as to drafting long distances?—I think there would be great difficulty.

It has never been tried?—No, but I talked to people about the idea of drafting them to Jhelum, and almost to a man they said they would not go.

We asked one witness yesterday and he said they might go if they had their officers with them?—Yes, that would be the only chance. There would be no chance otherwise.

Col. S. L. Jacob.

5th April 1898.

You say the minimum wage was fully sufficient. Is not the wage laid down by the ready-reckoner, or is it the minimum ration?—I meant the minimum according to the ready-reckoner.

Which according to some people represents more than the minimum ration?—Yes, I say they are too much if anything.

(*Mr. Holderness.*)—You say that the very pressure of circumstances drove officials to piece-work in spite of themselves during the present famine?—That I gathered from what I read, for instance, in the North-West. In the Punjab we were not allowed to resort to it except in the case of the Nardak as far as I know. I was anxious to resort to it. But of course we had not the prices to deal with that they had in the North-Western Provinces.

Do you think your proposal about executing operations on productive works that are not worth the cost would be accepted by the Financial Department?—It is very difficult for me to say what the Financial Department would do. For instance we did absolutely useless work on Hissar and Fatehabad roads. I could have proposed other works that would have been incomparably more useful works.

What sort of works?—Remodelling schemes, improvement of channels, improvement of rajbahas, and so on. For instance on the Western Jumna Canal there are an immense number of things you could do to improve it, but they are not quite worth the cost. How much better to do them than to do things worse than useless.

Under the present system in the case of improvements to existing capital work it would first be charged to Famine Relief, then it would be passed over to the capital account at the normal rate?—Yes.

Suppose you want to charge something less, how would you fix that?—Local officers would have to make recommendations, the Local Government would have to accept or modify these recommendations, and the Government of India would then pass their orders.

In the case of the Western Jumna Canal there were some cuts made?—Yes.

Was the whole cost of the cuts charged?—Yes.

If you had this rule in force would you charge only a portion of the value of the work calculated at normal rates to the capital account of the undertaking?—Yes.

MR. M. W. FENTON, Revenue Secretary to the Government of the Punjab, called in and examined.

Mr. M. W. Fenton.

5th April 1898.

I put in a written statement of evidence.

I understand that His Honour the Lieutenant-Governor included my name among the list of witnesses to be examined before the Commission, mainly with a view to my explaining any matters in the Provincial Famine Report which may require explanation.

2. Except that I visited the Jhelum Canal Relief Works with Sir Dennis Fitzpatrick and afterwards with Sir Mackworth Young, and the Ghaggar Canal Works with Sir Dennis Fitzpatrick, I have no knowledge or experience of famine operations other than such as has been acquired in the course of my Secretariat duties and as a member of the Executive Committee of the Charitable Fund.

3. The enclosed printed note is accordingly confined to a very few points. I have drawn up a list of sections of the Code with reference to which departures from the Code prescriptions were allowed. This list has been compiled after going through the notes of the several selected witnesses and referring to Secretariat papers. In regard to the details of the working of relief operations, any opinions of mine would be merely a conclusion derived from the opinion of the officers who speak with experience, but it may assist the Commission if I state in what manner Mr. Higham's proposals regarding classification and wages of relief labourers have been received by Punjab officers, and this I have accordingly done.

4. I also venture to submit a note on Famine Relief Programmes, as I have had a good deal to say to these during the past eighteen months. In connection with famine preventive measures there are one or two points which I would like to bring to the notice of the Commission in the hope that in their final recommendations the Commissioners will recognize that in the Punjab the great famine problem is prevention rather than cure, and will secure for the Province a more liberal treatment in future in the matter of expenditure on irrigation.

DEPARTURES FROM THE PRESCRIPTIONS OF THE FAMINE CODE.

Sections 31, 35, 38, 42.—It was found necessary after a time to let the Financial Commissioner drop out of the chain of correspondence. There is no intelligible reason why famine relief programmes should pass through his office. When programmes began to be exhausted it was necessary to correspond with Commissioners direct in some cases, even leaving out the Chief Engineer. The provision regarding famine correspondence being written half margin and forwarded from one office to another in original would have led to great inconvenience if persisted in.

Section 33.—As many of the works entered in famine programmes are of such a nature that only the exigencies of famine would justify their being carried out, it was found necessary in sanctioning programmes to expressly withdraw the permission accorded by this section to carry out as ordinary works at ordinary times works entered in such programmes.

Section 49.—The Deputy Commissioner did not always exercise such complete authority over Public Works officers as this section contemplates. In Gujrat for instance the officer in charge was practically independent of the Deputy Commissioner.

Section 51.—As a general rule officers were much too busy to submit diaries to the extent here contemplated.

Section 54.—I think the responsibility for programmes being kept up to the required mark was assumed by the Civil Secretariat and not by the Chief Engineer.

Section 57.—In the case of one district in which the works were under Civil management and it appeared that the outturn was ridiculously small, the Public Works Department disclaimed responsibility for seeing that the outturn of work in such cases was adequate.

Section 59.—It was found impossible to insist on the submission of quarterly relief programmes.

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Section 61.—I do not think the provision regarding the submission of half-yearly programmes to the Government of India was complied with.

Section 66.—Returns did not show the numbers on the *last* day of the week. It was considered that in view of the daily fluctuations of the attendance and of the fact that there were special considerations affecting Saturday's attendance the returns would afford a more reliable estimate of the extent of relief granted if they showed the *average* daily number for the week, and with the sanction of the Government of India this modification was introduced.

Sections 74 and 155.—Circle Inspectors had nothing to do with fixing the wages on relief works.

Sections 90, 91 and 92.—Captain Dunlop-Smith points out several departures from the Code in the matters here dealt with.

Section 111.—Piece-work was allowed on one work in Karnal towards the close of the famine.

Sections 115 and 127.—As noted in the Provincial Report, the classification of the Code was found too elaborate, and in most districts only B and D workers were retained. In Hissar and on some works elsewhere a practice of promoting B labourers to Class A was adopted.

Section 120.—Public Works officers were not always subject to the control of the Civil authorities.

Section 126.—The wages to new arrivals were often not given as the system led to abuses.

Section 130.—Sometimes not complied with.

Section 131. Sunday wages.—Not observed in many cases. Work was sometimes allowed on Sundays, wages were not paid on Saturdays, and often neither work nor wages were allowed.

Section 133.—The mate or gangsman was not always appointed from among the relief workers.

Section 134.—Mr. Granville says the section was not complied with on the Jhelum Canal. He does not explain.

Section 136.—Last clause was not complied with.

Sections 140, 140 A and 141.—See paragraph 81 of Provincial Report.

Section 142.—The Code type of hut is not quite satisfactory. It was found preferable to give the people materials to make their own lean-to huts.

Section 249.—See paragraph 106 of Provincial Report.

Section 258.—By the orders of Government this section was made permissive and not mandatory.

Classification of Relief Labourers.

Practically all officers agree to Mr. Higham's Classes Y, Z and working chidren, but the following officers are against a special class :—

Mr. Thorburn.
Colonel Hutchinson.
„ Jacob.
Mr. Goument.
„ Connolly.

These officers would treat mates, water-kahars, conservancy chowkidars, carpenters, thatchers and the like as petty establishment payable by the week or month according to the market rates of wages for which their services could be obtained. As observed by Colonel Jacob, these special labourers must be entertained not for their own sakes, but for the sake of the famine labourers. They will seldom be got for the X wage proposed by Mr. Higham. Either the men of this class are famine-stricken or they are not: if they are, they will accept the Y wage ; if they are not, they will only come for a rate of wage which will attract them, and ordinarily the proposed X wage would not be high enough for the purpose. By abolishing this class and treating special labourers as petty establishment the returns will all be greatly simplified.

Wages.

Mr. Higham proposes to give wages as follows to relief workers :—

To Class X . .	The A male wage of the Code.
„ „ Y . .	„ B male wage of the Code.
„ „ Z . .	„ D female wage of the Code.
„ working children (between 7 and 12). . .	8 chattacks.

Leaving out of consideration for the present the wage proposed for working children, Mr. Higham's proposals as regards the wages of adult workers involve two propositions—

(*i*) That the present Code scale of wages is suitable.

(*ii*) That the X, Y and Z workers of the proposed new classification may for the purpose of wages be regarded as corresponding to the A, B and D (female) workers of the Code classification.

We may first examine proposition No. (*i*).

There are two Code scales of wage,—the section 166 scale and the section 174 or "grain equivalent" scale. Mr. Higham's proposed wages are based on the section 174 or "grain equivalent" scale. Now though the section 166 scale has not been found fault with generally by the Punjab officers who have had experience in the recent famine, the 174 scale has come in for a considerable amount of criticism. As regards the section 166 scale, it may be observed that the wage for A labourers alone is given, and there is no indication how much below the A wage the B, C and D wages should be. Inasmuch as the task for B labourers is, under section 119 of the Code, fixed at 15 per cent. less than that for A workers, most officers fixed the B wage under section 166 at 15 per cent. less than the A wage. Now the section 174 scale fixes the B wage at an average of only 10 per cent. less than the A wage, and Mr. Higham's proposed wage for Y labourers is only 9·5 per cent. less than the wage for the X Class, so that on this account alone the section 174 method gives to B labourers a higher wage than according to Punjab practice they have got under the section 166 method.

The section 174 method ordinarily allows a margin of from 25 to 37½ per cent. of the value of the grain item as compared with the section 166 method. It appears, however, from the Resolution of the Government of India quoted in Appendix D of the Punjab Famine Code that the Government of India quite contemplated the existence of a margin so large. Thus under the present Code it is open to the Famine Officer, unless the Local Government otherwise directs, to adopt an economical or an extravagant scale. I say extravagant because if the economical scale is sufficient for the purpose, as it has proved to be in the Punjab, it is extravagant to adopt a scale giving higher wages. A very small difference in the wage scale involves a very great difference in the total cost of famine.

Mr. Higham's proposals now involve the adoption of the extravagant scale without the alternative, which has heretofore been permitted of adopting the economical scale. It may be, and no doubt is, desirable that there should be only one scale. The adoption of two scales within the same district or in adjoining districts might result in all the labour gravitating to the works on which the higher wages are paid.

The foregoing considerations have led several officers to the conclusion that some of Mr. Higham's proposed rates are too high. The X rates are not generally criticized because the class will be a small one and because serveral officers consider such a class unnecessary. Mr. Clarke and Mr. Wakefield would fix the Y wage at 32 instead of 38oz. and Mr. Floyd at 36oz. Captain Beadon, Captain Parsons and Mr. Connolly consider the section 174 method of fixing wages unnecessarily liberal, but do not say what allowances in their opinion should be given. Colonel Jacob, Mr. Bird, Mr. Campion and Mr. Granville consider Mr. Higham's rates appropriate, but Mr. Granville's approval seems to be based on the apprehension that it will be necessary to reduce wages considerably by fining.

The allowance of 26oz. proposed by Mr. Higham for Class Z is generally considered suitable. It is to be remembered that the Z Class in future will include many workers who have heretofore received wages as B or C labourers or as D males, and who at Mr. Higham's rate will in future receive the wage of D females only. This consideration counterbalances the excess arising from the adoption of the principle of section 174.

Mr. Clarke and Mr. Wakefield would have 24oz. instead of 26oz. for this class. Mr. Floyd on the other hand would give 30oz.

Mr. Higham's rates for working children are generally considered appropriate, but one or two officers consider 16oz. insufficient.

Messrs. Hilton and Goument would make all famine wages consist of a variable plus a fixed sum, the variable being the price of the grain item and the fixed sum the allowance for the subsidiary items which, it is thought, can be fixed in money, as the prices of the subsidiary items do not as a rule fluctuate much.

Mr. Higham does not explain how he proposes to deal with short work. That he contemplates fines being imposed is apparent from paragraph 19 of his memorandum. The Y wage if fixed as high as Mr. Higham proposes will certainly leave a margin for fining, but the Z wage being itself the minimum leaves no margin. It probably will be unnecessary, however, to fine carriers, as experience shows that they can always carry away all that the diggers supply to them, and therefore it ought to suffice to fine the diggers of a gang when the outturn is deficient.

On the whole I think that Mr. Higham's scale of wages (except for Class X, which is unnecessary) should be adopted, it being noted that the Y scale leaves ample margin for fining in case of short work.

Sunday Wages.

The present Code requires that Sunday be kept as a holiday, the relief labourers receiving the minimum wage.

Except Mr. Floyd, no officer would allow work to be done on Sunday. Mr Floyd would allow relief workers to earn a wage by working on Sundays. Nearly all officers are agreed that a Sunday wage should be given or that relief workers should be allowed to earn its equivalent by extra work on week days.

Three methods are suggested—

(*a*) Mr Higham's plan of allowing workers to earn an extra wage by extra work on week days. Colonel Jacob and Messrs. Granville and Connolly concur. The objection to this plan is that those who do not or cannot perform the extra tasks necessary for the Sunday wage will have to go without any food on Sundays. As *ex hypothesi* they only get enough for subsistence on week days it will end in the Famine Officer having to give them an allowance for Sundays and thus putting them on a level with those who have earned such allowance by extra work. Such a system would be unfair. Another objection to Mr. Higham's plan is that the works which in future will be carried out by task-work will probably be of such a nature as to make it a matter of little importance whether they are pushed on or not, so that there would be no object in offering inducements to increase the outturn of work.

(*b*) Give a Sunday wage directly as in the present Code. Colonel Hutchinson, Captain Beadon, Messrs. Campion and Goument would adopt this method, but Captain Beadon would give it only to those who had been on the works throughout the week and Mr. Campion to those only who live on the works.

(*c*) Make an addition to the wage earned on each week day, without requiring extra work on account of such addition. This is what Messrs. Bird, Hilton and Ganga Ram propose. The objection to this plan is that those who do not remain at the works till Sunday will be receiving more than they actually require for the week days. Having received this they may leave and put in a day's work at home on Sunday.

Captain Davies would give no Sunday wage at all. Captain Parsons would leave it to the discretion of the officer in charge. Emaciated zamindars, he thinks, might require it, but *kamins* are never in need of a Sunday wage.

My own opinion is that a direct Sunday wage should be given to those who live on the works and are present thereon on Sunday. In the case of village tanks and like works at the people's own homes it is unnecessary. When, however, people are so far from their homes as to have to reside on the works it is evident that they have no other means of subsistence than the relief wages, and they must be fed on Sundays. Is then the man who comes on Saturday to get as much as he who comes on Wednesday or Monday? Logically he should get as much as he requires a day's food just as much as a man who has worked all the week; but it is absolutely necessary to guard against the abuse of relief workers joining on Saturday in order to get the Sunday holiday and wage. The plan might be adopted of making the Sunday wage equal to one-sixth of the aggregate amount earned during the previous week subject to a maximum of one Z wage for each adult worker. It is unnecessary to give the Y labourer a Y wage for a day on which he does not work. Under the present Code he only gets a minimum wage and the Z wage corresponds to the present minimum wage. Whether the Sunday wage of the working child should be the equivalent of a full week day wage or less requires consideration.

Mr. M. W. Fenton.

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Famine Relief Programmes.

I propose that—

(I) The Public Works Department be made responsible for the maintenance of relief programmes.

(II) Every effort should be made to include a certain number of large works in our relief programmes.

(III) An annual allotment be made for the purpose of surveys of irrigation and other works suitable as relief works.

As to (I) the present procedure for the preparation of relief works programmes is laid down in sections 28—33 of the Famine Code. Before a programme is sanctioned under the present arrangements it has to pass through the following offices in succession: (1) Deputy Commissioner, (2) Executive Engineer, (3) Deputy Commissioner, (4) Commissioner, (5) Superintending Engineer, (6) Commissioner, (7) Secretary to Government, Public Works Department, (8) Financial Commissioner, (9) Government Civil Department, (10) Government Public Works Department, (11) Government Civil Department, which sanctions the programme. The delay which arises from such a system can easily be imagined. Whether the result was intended or not, the practice has come to be that the Public Works Department regard the programmes from a critical point of view as the product of another Department which is in need of professional guidance and requires to have mistakes in rates and outturn and cost estimates pointed out. There does not seem to me to be on the part of Public Works Department officers that sense of responsibility for the programme or consciousness of its defects and inadequacy, when it is inadequate, which might be expected, but which will probably be expected in vain so long as the present system continues. The Public Works Department, and not the Deputy Commissioners, should be made primarily responsible for the initial preparation of programmes.

It is not every Deputy Commissioner who has an Engineer's eye for new projects, and ordinarily the Deputy Commissioner has not the time or the professional qualifications necessary for the investigation of projects of any size.

The Code should, I think, be framed so as to provide for the Executive Engineer, Superintending Engineer and Government in the Public Works Department, consulting respectively the Deputy Commissioner, Commissioner and Government in the Civil Department, instead of the reverse arrangement as at present. The Financial Commissioner, in the matter of relief programmes, is a fifth wheel in the coach, originally added, I believe, in order to save trouble to the Secretariat by putting the proposals of local officers into proper shape. The Financial Commissioner may be omitted in future.

The provisions in section 33 that works entered in a sanctioned programme may be carried out at any time, should be struck out. Until our programmes are vastly improved the bulk of the works will be such as should not be undertaken except under the pressure of famine, and there should be no such *carte blanche* permission as is given by section 33 to undertake programme works at any time.

* Delhi Division.—Hissar, Rohtak, Gurgaon, Delhi, Umballa, Karnal.
Jullundur Division.—Kangra, Hoshiarpur, Ferozepore.
Lahore Division.—Lahore, Amritsar and Gurdaspur.
Rawalpindi Division. Gujrat, Jhelum, Rawalpindi.
Peshawar Division.—Hazara.
Derajat Division.—Bannu, Dera Ismail Khan.

(II). Famine relief programmes are required to be kept up for 18* out of the 31 districts of the Punjab. In some cases these programmes are required for portions of the districts only. Owing to the exhaustion of useful works in the recent famine the programmes as they now stand contain very few large works other than roads. In fact they are so few that they may be enumerated :—

District.	*Name of Work.*
Hissar	Pirwala tank.
Delhi	1. Fatehpur-Asaula Band. 2. Delhi-Agra Railway. 3. Metal breaking for No. 2.

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District.	*Name of Work.*
Umballa	1. Canal cuts-off. 2. Ladwa drainage scheme. 3. Cleaning Kurukshetra tank. 4. Removing spoil earth, Sirhind Canal.
Hoshiarpur	Jullundur-Hoshiarpur Railway.
Ferozepore	1. Ferozepore-Ludhiana Railway. 2. Raising and strengthening banks of canal distributaries. 3. Clearing silt from Sirhind Navigation Channel.
Gurdaspur	Ujh Canal.
Gujrat	1. Jhelum Canal. 2. Embankments for regulating Bhimber floods.
Lahore	Annhi nullah irrigation scheme.

The above list is a rather poor one. There are no large works or large works of any value in the Hissar, Rohtak, Gurgaon or Karnal districts, and yet there is reason to suppose that if proper professional skill were directed to the devising of useful projects they would be forthcoming. Under ordinary circumstances irrigation works, which are admittedly the most useful for famine purposes, are never proposed without an attempt to show that they will be financially remunerative. On the other hand, roads and tanks which may be almost devoid of utility are freely put down in relief programmes, although roads may not only be financially unremunerative but may entail charges for annual repairs in the future. Irrigation works should be divided into—

(*a*) those which will yield an annual return either in direct rates or in enhanced land revenue, equal to or exceeding 4 per cent. interest on the capital expenditure after meeting maintenance charges;

(*b*) same as (*a*), but the return is less than 4 per cent;

(*c*) those which yield no return beyond what is sufficient to meet maintenance charges;

(*d*) those in which the returns do not suffice for maintenance charges.

Under ordinary circumstances—that is, in times other than famine times—any project falling under (*b*), (*c*) or (*d*) would not be looked at by Government. Why this should be so I fail to understand, as in the case of roads and railways there is not the same insistence that each scheme must be proved to be remunerative. As then class (*b*), (*c*) and (*d*) projects have little chance of acceptance officers seldom think it worth while to bring them forward. As regards classes (*b*) and (*c*), I think that it will now be admitted that they are pre-eminently suitable for inclusion in famine programmes. As to class (*d*) there may be a difference of opinion, but two considerations should be borne in mind with reference to this class of irrigation work,—*first*, that, if it is legitimate to construct a metalled road which will for ever after entail a charge on account of up-keep equal to 10 per cent. per annum on the capital cost, it may be equally legitimate to undertake an irrigation work involving a like annual charge; *secondly*, though an annual charge of the kind may be entailed in the immediate future, it may often happen that on revision of settlement the additional assets created by the irrigation or its protective effect may enable the State to recover additional land revenue or to avoid reductions of land revenue which, but for the protection given, would be necessary.

(III). Something more, however, is necessary than the transferring of the work of maintaining famine relief programmes to the Public Works Department and indicating the nature of the works which should in future find a place in the programmes. There should be an annual grant for surveys. Whether this grant should be expended on additions to the establishments of the several Divisional Engineer officers or in employing an officer with an establishment on continuous special duty connected with surveys is a matter of detail. It will, I think, be granted that the Public Works staff employed in ordinary times is insufficient for any extra survey work such as is now contemplated. When Sir Dennis Fitzpatrick, at the commencement of the famine, directed the preparation of emergent relief programmes, the Public Works officers were obliged to entertain additional establishment for the purpose, the cost of which establishment was met from famine funds. In ordinary times we have no famine funds and no machinery for the systematic prosecution of survey operations. When the Government of India asked the Punjab Government for proposals for new railways to lay before the Railway Conference, it was intimated that only schemes for which surveys had been made could be taken into consideration. As railway surveys had never been undertaken by the Local Government for want of funds, the Province was consequently at a great disadvantage in putting forward the claims of the railway projects within its borders. The Local Government has no funds for surveys because the quinquennial contract arrangements recognise no claims for an allotment for the purpose. It has been explained in paragraph 124 of the Provincial Famine Report why the Local Government cannot construct irrigation works. The same want of funds hampers it in the matter of surveys. It may be said that the surplus which accrues to Local Governments under the quinquennial contract arrangements is available for these purposes, but such surpluses, when they do accrue, are not more than sufficient to meet the growing needs of the Administration. The proper development of the administration of the Chenab Canal Colony would alone absorb all such surplus. It is only by the allocation of a special grant for surveys, which the Local Government may not divert to other purposes, that the object under consideration is likely to be attained. Such a grant might legitimately be considered a special form of famine insurance. Before leaving the subject I would urge the importance of the Lower Bari Doab Canal project being surveyed. If ever there is a famine in the centre of the Punjab this would be an ideal relief work, and besides serving Ferozepore, Lahore, and Amritsar and Montgomery it would be a work to which labour could be railed from Hissar.

Famine Preventive Measures.

Famine preventive measures may be measures of Production or of Distribution. As regards Distribution I have nothing to say. The Punjab is very well off in the matter of railways— some people might say too well off, looking to the extent to which these railways have served to drain off its surplus produce.

Measures of production may be such as will afford direct protection to an insecure tract by making it secure, or may be directed to increase the food-supply of the people generally. Of the desirability, from the famine preventive point of view, of carrying irrigation to an insecure tract and thus rendering it secure, there can I think be no two opinions. There is still scope in this Province for works of this description. Mr. Connolly says that Karnal could be rendered secure by the expenditure of six lakhs. Colonel Jacob, I believe, could bring forward some useful schemes for further extending irrigation from the Western Jumna Canal in Hissar and Rohtak. Doubtless something could be done in connection with the *jhils* in the Gurgaon district, which seem to afford far less in the way of irrigation than formerly when they were under the Public Works Department. In the south of the Umballa district it is believed that there is ample scope for irrigation and drainage schemes, but here nothing should be attempted without careful surveys. Much could no doubt be done to improve the Ferozepore inundation canals which to some extent failed in the recent famine. It is needless to multiply instances, but if the principle that it is desirable to make insecure tracts secure be admitted, it might I think be made the subject of one of the recommendations of the Famine Commission that funds be provided for the purpose.

As regards measures which have for their object the increase of the total food production, the Famine Commission of 1878 contemplated this object being attained by—

(*a*) extension of cultivation;

(*b*) improvement in the outturn of existing cultivation.

Both (*a*) and (*b*) are compassed by irrigation works, but as noticed in paragraph 117 of the Provincial Famine Report, the advocacy on the part of the Famine Commissioners of such works as the Chenab Canal, by which irrigation is extended to previously unpopulated tracts, was not so warm as we would now expect any recommendations dealing with this matter to be. On the other hand the Famine Commission, I think, attached an undue importance, at any rate so far as the question affects this Province, to measures of agricultural improvement other than irrigation. I think it desirable to call attention to this matter because the Government of India, in opposition to the advice of the late Lieutenant-Governor, have called upon the Local Government to spend money upon experimental farms and upon an agricultural establishment which shall include at least one expert from England. It is true that the exigencies of famine and plague have been recognized, and the expenditure on the objects specified is not to be undertaken until the Local Government is in position

to incur it; but if the wishes of the Supreme Government are to be observed, as they must be, expenditure on such attempts at agricultural improvement must precede expenditure on many other objects of greater importance.

I could give reasons for the view that agricultural experiments are not likely to yield any results commensurate with the expenditure which the Government of India orders contemplate being incurred, but it is unnecessary to go into the question at present. Briefly, if the problem before us is how, given a certain sum of money to be spent with that object, we shall do most to increase the food-supply of the people,—whether by promoting intensive cultivation or by extending cultivation to new areas,—the answer for the Punjab should I think be, that as we can insure the desired results by spending money on the extension of cultivation, *i.e.*, by providing the irrigation which effects such extension, we should direct our expenditure accordingly, and not devote money to experiments which may or may not be productive of good results. It is to be remembered, moreover, that by irrigating unirrigated land the produce will be increased in a far greater proportion than is likely to result from the application of scientific manures or the introduction of new staples. Without irrigation manure is useless, and without irrigation the most approved exotic staples will fail equally with the indigenous produce. Doubtless in other parts of India the pressure of population on the soil, the absence of new lands suitable for the plough, the inadequate returns yielded by irrigation works and other conditions foreign to the Punjab, make the problem of increasing the food-supply present quite a different aspect. It is only with reference to this Province that I venture to allude to the question. The policy of the Government of India has for years been based on the recommendations of the Famine Commission of 1878, which, notwithstanding 20 years of subsequent experience, are still often treated as economic axioms. It is to be hoped that the present Commission will brush away a little of the sanctity attaching to every utterance of the Commission of 1878.

(*Mr. Holderness.*)—Better preparation of programmes. What has been the difficulty about programmes—that they are insufficient?—As regards procedure, the difficulty is that generally the correspondence is much too long, and also the Civil Department is regarded as responsible, but its being more or less a professional duty, I am of opinion that the Public Works Department in the first instance ought to have the preparing.

You had, I suppose, in the first instance an insufficiency of relief works?—Rather an insufficiency in character, that is in quality than in quantity. Then we had to get them up in a hurry, for Sir Dennis Fitzpatrick ordered programmes to be prepared for all districts, they having previously only been prepared for 12 or 13. Then this lengthy correspondence was found difficult, and the Financial Commissioner was dropped out.

Has the Local Government any idea of now undertaking the proper preparation of programmes?—It has not got the money for this.

Then where do you propose to get this money?—Only by asking for better treatment in the Provincial Contract, or when all this famine is over we may be able to devote money.

You do not make any recommendation, do you, for charging the cost of these famine programmes to head of "Famine Relief"?—No. The cost in any case would be Provincial.

You only want special allotments?—Yes, which cannot be diverted to other purposes.

And then as to staff, is the Public Works staff sufficient for these programmes?—I believe not. The Irrigation Department are always fully employing their own officers and I presume that officers of the Irrigation Department should be employed in preparing irrigation schemes.

I don't think these departures from the Famine Code are very important?—They are all in details.

You say the Sunday wage was not observed in many cases. Is that quite so?—Looking at the Famine District Reports generally it was observed as a holiday, but in Karnal labourers were allowed to work; in Hissar as a general rule no wages were given for Sunday; in Lahore, Ferozepore and Umballa, except on one work, no Sunday wages were paid.

As to the classification of relief labourers, your officers seem to agree to Mr. Higham's proposals?—Yes, except as to Class X.

Now as to wages, you have examined Mr. Higham's proposals very carefully, and your general conclusion is that his proposed wage scale should be adopted?—Yes, for the reason that though in some cases it may work out more liberally than the present scale, it has counterbalancing considerations.

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Does it work out more liberally than the scale hitherto paid?—To begin with the Y labourer under this scale gets the B wage calculated according to the grain equivalent method. In the past famine he got it according to the actual cost of rations method as a general rule, which gave him 15 per cent. less than the A wage, although the ready-reckoner method on the average gives only 10 per cent. less than the A wage. That is one reason for its being lower. Another reason is that 75 per cent. is a somewhat large allowance.

(*President.*)—As to the Sunday wage, your final conclusion is that it should be given to those who live on the works and are present on Sunday?—There should be a Sunday wage. You can deal with it in three ways. You can either give an extra wage for Sunday, or give something added to the week day wage, or you can give something on Sunday calculated with reference to the weekly wage.

Your conclusion is to limit it to those who live on the works and are present there on Sunday?—Yes; for instance those who go on village tanks should not get it.

And those who walk to the works?—They spend thire Sundays at home and have no occupation.

You talk of the principle of section 174. The principle you object to is taking 75 per cent. of the amount to be allowed?—Yes.

(*Mr. Holderness.*)—About the Gujrat works. I suppose at the time that the Public Works Department took it over there was laxity?—That was the general view.

And that led to the large numbers?—Yes.

And they went down as soon as the Public Works Department took it over?—They did not go until Mr. Granville came. They were six weeks under Captain Douglas, but his time was spent in effecting the improvements which bore fruit under Mr. Granville; and then they began to go down.

With that exception, was there in any district undue laxity of administering the famine?—No; it was insufficient establishment, I should say, rather than undue laxity. In the previous famine in Sharakhpur no doubt wages were fixed much too high.

That was in Lahore?—Yes.

What is the view taken by the Punjab Government about the relief to dependants—too much taken advantage of by persons?—I think Sir Dennis Fitzpatrick was inclined to take the view that the people who came to relief works were really in need of subsistence, and that we should not be hard on them. But it was under his orders that the Circular issued directing kitchens to be started.

(*Dr. Richardson.*)—Had people anywhere nothing but the wage to subsist upon in this famine?—As far as I could see on the Gujrat works and on the Jhelum Canal the jungle was very very sparse indeed, so that they could not have had jungle products.

Were they entirely dependent on the wage?—I should think where they came to works from neighbouring villages they probably had some resources at home.

The majority of relief workers in the Punjab did come from surrounding villages?—As a matter of fact they had something to fall back upon except in very famine-stricken villages. I think that in many cases if relief works had not been started the zamindars would have fed them themselves.

(*Mr. Holderness.*)—I see from paragraph 57 of the Provincial Report that you started a sort of dual agency on your works and finally gave it up?—We had all three stages—first Civil officers purely, and they were assisted by a few *mistris* and overseers; then we brought the Executive Engineer to look after the purely professional work; and finally we put in the Executive Engineer in charge of the work.

When you placed the Executive Engineer in charge of the work did you give him the assistance of a Revenue officer to look after the camp, placing the service of that officer under him?—He had Tahsildars and Naib-Tahsildars entirely under him, and when they were deputed to Public Works they were from the first under him.

Did a copy of the North-Western Provinces Rules regarding works to be executed out of part recoverable advances come to the Punjab Government?—It did, but it was thought that it was more suitable to villages of large

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zamindars and big land-owners than to villages of small proprietors.

Don't you think that they might be used in small commercial communities?—I think they might be used, but I recollect the rules came rather late.

What effect had this Circular on Native States regarding non-interference with the grain trade?—We had no more trouble except with Bahawalpur, and there they complained that they were being inundated by Bikaniris, and they did not want to have people coming into their country, and they objected to allowing grain to go out. But we pointed out that people came into their country because grain was not allowed to go out, and its being cheaper naturally attracted outsiders.

Did they still hold to their policy of preventing export?—Comp'aints ceased afterwards. In the first instance they were made by *banias*.

In paragraph 62 of the Punjab Famine Report the average wage for a relief worker in the famine district is given. I should like to have on record your explanation of the particularly low rate in some districts; for instance in Rohtak the rate is 11·1 pies?—Well, low classification of the labourers in Rohtak, and also I believe they gave them the wage there which they found by experience was accepted without much reference to sufficiency or otherwise.

Works in Rohtak were all village tanks?—Yes.

I suppose the villags proprietors in those big Rohtak villages were ready to get such work as digging tanks?—I should think so.

And in Gurgaon the rate is also low. Can you explain that?—It may be partly because in the returns they converted this payment of wages in grain into money afterwards and returned the amount of money as the wages paid.

The wages were very low?—Low certainly, considering they got nothing but the grain.

What sort of works were the works in Gurgaon?—Roads and tanks.

And in Ferozepore?—There were two large tanks under the Public Works Department and a number of small municipal works round about the city. I can't say why wages were so low there: chiefly because of fines, I think.

Written statements of evidence and written answers to the Commission's questions sent in by witnesses selected to give evidence before the Commission in the Punjab, but not examined.

Written statement of evidence by CAPTAIN C. G. PARSONS, *Deputy Commissioner, Umballa, dated 10th March 1898.*

Capt. C. G. Parsons.

PART I.

Brief account of the Famine as it affected Umballa.

An account of the previous famines which have affected the Umballa District is given at page 30 of the Umballa Gazetteer (1892-93).

English records of these famines are scanty or non-existent.

The famine of 1868-69 which affected many districts of the Province did not touch Umballa so nearly, but sanction for suspension of a lakh of revenue (Khalsa) was asked for. There is no district report on record, but returns of relief given in the district are embodied in the Provincial report printed on that occasion. When the famine of 1896-97 declared itself, a docket asking for sanction to the suspension of the lakh in 1868-69 was the only record of the previous famines which could be found, though it is possible there may be some records which have got mislaid.

The prices reached in the famine of 1896-97 are believed to be the highest on record. In towns wheat at one time in 1896 sold at 7 seers, and wheat, gram and maize at 8 seers in 1897. In rural tracts wheat, gram and maize were sold at the common rate of 10 seers for a period. Famine prices existed from *kharif* 1896 to *kharif* 1897. In the famine of 1860-61 wheat is believed to have been sold at 8 seers.

The acutest distress amounting to regular famine occurred in Hissar, and to a smaller extent in Karnal; Umballa, as has usually been the case in this Division, remaining on the fringe of the area of acute distress.

There were tracts in Umballa, such as the low lands (*khadir*) of the Jumna, the Neli tract of the Ghaggar, and the low lands (*bet*) of the Markanda, which yielded good crops all through the drought, and in the loam (*seoti*) lands there were also crops of an indifferent kind obtained, while again in the Rupar and Kharar tahsils of the Rupar Sub-Division the crops were not so bad as to call for any considerable suspensions of revenue.

In the Umballa tahsil during the famine period over ₹30,000 of revenue were suspended, in Naraingarh over ₹50,000, in Jagadhri over ₹47,000, and in Pipli over ₹24,000, while in Rupar and Kharar only ₹1,000 and ₹3,000 were suspended respectively (total suspensions ₹1,60,000). Thus as the district was itself producing a certain amount of food-grain, and the means of communication for the import of grain are excellent, grain was in all parts available for those who had the means to buy it (the sole exception perhaps being the Morni hill tract, where stocks ran out without being quickly replenished in villages difficult of access).

In considering the famine question the sub-division (Rupar and Kharar tahsils) may be left out of consideration. There have been no instances of recorded serious distress from complete failures of crops in this sub-division, and recent experience has shown that it may be considered as practically a secure tract. The four tahsils dealt with were Umballa, Naraingarh, Jagadhri and Pipli, comprising an area of 1,540 square miles with a rural population of say 584,000. Classing (from census guides) 294,000 as agriculturists, 290,000 may be returned as "others." A large deduction must be made from this total to allow for village shop-keepers and traders above the reach of want; but after this deduction has been made an estimate is reached of the size of that body of persons who in a period of famine prices live in a state of deprivation which is akin to slow starvation.

Village serfs or beggars in receipt of recognised doles may be excepted from this class; but manual labourers and field helps, carriers and others, all come into it, and, owing to the indolence and pride of the Rajput zamindars and others, there are unusually large communities of these in the district. These people in a time of famine form a large body of "the unemployed," which is swelled by weavers who are given no orders to weave, and petty handicraftsmen who get no work to do. They may be classed roughly as the great body of *kamins* or *kangals*. It was this body which felt the extreme pinch of the famine. The agriculturists they ordinarily serve no longer employed them, and they could obtain no credit with the *bania*. The zamindars had credit and lived on it. Thus the calamity might have been described as a "zamindar's scarcity" and a "*kamin's* famine."

There can be little hesitation in saying that these lower classes would succumb earlier in such periods if the wild produce of the earth did not afford them food of a kind.

These classes have generation after generation been accustomed to supplement their diet in this way. Appended is a list of stuffs found in actual use in Chamars' kitchens, when their houseswere entered without warning. The wild *sanwak* (bulrush millet), which differs little in appearance from the cultivated millet, furnishes the most acceptable substitute for food-grain, and wild leeks (Punjabi *baghat*) are used as vegetables. It was reported that the menials employed on one occasion during the famine to cut the grass on the Cantonment Grass Farm lands saved their wages, existing almost entirely on the wild bulrush millet found plentifully on the lands of the Farm.

The fact that the diet of these classes is supplemented in this way cannot be overlooked or disregarded. It must be taken into consideration that one of the natural safeguards against death from starvation amongst the lower classes is supplied by the wild products of the earth. The people realize this themselves, and it cannot be part of the famine officer's duty to dissuade them from following established practice. Work may be offered them certainly, but if it is found that they will not go from home to even a fairly neighbouring relief work, but prefer to live on without work at home, then it must be presumed that they do not fear starvation, however indifferent and uncivilized is the food which they obtain.

In Umballa relief works were started at the close of 1896, and with the exception of one considerable canal-cut, these works consisted of tank works amounting to 38 in number.

Persons were employed to the following extent:—

In the week ending	28th	November	1896	1,000
,, ,,	5th	December	1896	4,000
,, ,,	6th	February	1897	5,000
,, ,,	13th	,,	,,	16,000
,, ,,	20th	,,	,,	27,000
,, ,,	13th	March	,,	34,000
,, ,,	20th	,,	,,	33,000
,, ,,	27th	,,	,,	22,000
,, ,,	3rd	April	,,	13,000
,, ,,	10th	,,	,,	4,000
,, ,,	15th	May	,,	5,000
,, ,,	22nd	,,	,,	9,000
,, ,,	29th	,,	,,	15,000
,, ,,	12th	June	,,	13,000
,, ,,	19th	,,	,,	8,000
,, ,,	26th	,,	,,	4,000
,, ,,	17th	July	,,	1,000

These are weekly totals and have to be divided to show the number employed on any one day. Thus the largest number employed on any given day only reached to 4,800. The big totals in February and March were caused by the canal-cut being then in progress.

Although these works relieved distress, it is doubtful whether they directly prevented any loss of life. That the body of "the unemployed" did not fear loss of life was clear from the fact that bodies of people did not move to work centres.

Works were filled (even in the case of the canal-cut) by people coming from villages around, to whom it was no trouble to move on to the works. There was no general tendency evinced to search for work wherever it might be found. In April there was indeed a general move (which left all relief works deserted) in search of the accustomed harvest labour to tracts where there were crops, but this was the only general move in search of work displayed, and this, moreover, was a normal move.

On the tank works the District Board expended ₹24,000. This money was not ill-spent, as it gave numbers the means to buy good food; but regarding the works merely as measures preventive of death by starvation, they must be considered as having been rather premature.

On gratuitous relief in rural tracts ₹7,000 odd were expended from District Funds This system of relief might perhaps have been advantageously adopted instead of relief

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works, but there was difficulty about capable and reliable agency. A couple of Naib-Tahsildars were eventually detailed to organise the distribution of gratuitous relief. To bring relief to the effete and incapable and helpless amongst the lower classes, and to the widows and helpless families amongst the zamindari classes, was probably the most important matter of all, and at the outset had a good system of gratuitous relief been possible, probably no attempts at relief works would have seemed necessary at all. A spinning establishment was maintained for many months in Umballa City which greatly assisted the poorer women of the town.

The actual relief, direct and indirect, during the period was as follows:—

From District Funds.

	R	R
I.—On relief works (tanks) under District Officers	24,447	
II.—Gratuitous relief	7,331	
III.—Poor-house	36	
IV.—Spinning establishment	2,424	
V.—Miscellaneous	2,360	
		36,598
From the Indian Famine Charitable Relief Fund.		
Cheap shops	6,000	
Cash relief in villages	4,000	
Advances for cattle	5,000	
		15,000
From Provincial Funds.		
Advances for seed and cattle		44,000
Suspensions of revenue.		
Government revenue	87,200	
Assigned revenue	72,600	
		1,59,800
GRAND TOTAL		2,55,398

Through all this distress zamindars who had no home stocks left lived on their credit. Such as could no longer mortgage were forced to sell sufficient land to suit themselves. They did not seriously consider the question of accepting State-paid labour. The *bania* served their turn in the traditional way. The most indebted no doubt reduced their diet and the number of their meals, but they were not reduced to the condition of claiming relief from the State. They only considered how much the *bania* would lend.

PART II.

Discussion of the points under the consideration of the Commission.

Before dealing with the points mentioned by the Secretary to the Commission as those on which witnesses are desired to give evidence, I have thought it best to draw up a brief account of the main features of the famine as it affected Umballa.

It will be seen from this account that in Umballa only one relief work of any size was undertaken, *viz.*, the canal-cut on the Western Jumna Canal. All other works were petty tank works. The canal-cut, moreover, was not a large work compared with works undertaken in other districts. Relief works were in their infancy in this district, and fortunately did not expand into maturity. As far as relief works are concerned, therefore, it is not possible for me to deal from experience with departures from the prescriptions of the Famine Code.

As to point (*b*), I have said in the account of the famine that, regarded merely as measures preventive of death from starvation, the relief works were probably premature. They afforded relief in giving numbers of the lower classes the means to purchase good meals instead of relying upon indifferent food and wild produce, but I think that under the circumstances which prevailed a good system of gratuitous relief which would have reached the helpless in the villages would probably have met the needs of the district better than relief works.

As to (*c*) and (*d*), I can sum up the case as far as Umballa was concerned as follows:—

(1) There was a very large body of the labouring class thrown out of employ which, when prices put sufficient proper food out of reach, lived in a state of debilitating deprivation, eking out such good or rotten grain as could be obtained by the customary addition to meals of the wild produce of the earth. This class, though not in danger of death from starvation (except occasionally in the case of the effete and helpless), underwent a process akin to slow starvation which, had prohibitive prices continued longer, must have eventually led to extensive mortality.

(2) There was a very large body of thriftless and indebted land-owners. These land-owners (who never save money, but are always in debt to the usurer even in ordinary times), when their food stocks were exhausted lived on credit, pledging land as security, or, if they could mortgage no longer, selling sufficient to meet their needs.

To feed these classes sufficient grain was poured into the district. It has been calculated from the Railway Returns that four lakhs of maunds of food-grains were imported in a period of nine months, commencing from January 1897; and as the want of grain was felt when the spring harvest of 1896 failed, it may be estimated that about as much was imported in the preceding nine months. If this estimate is at all correct, then about eight lakhs of maunds were imported in eighteen months. These imports, in addition to the stocks the district originally possessed and to the produce taken from the fortunate tracts throughout the drought, sufficed to meet food requirements. It was a mere question of ability to purchase. As the land-owners by borrowing were able to purchase, they, except in very rare instances, never contemplated trying to obtain any of the forms of relief possible under the Famine Code. To get a dole of cash from the State they would have had to dig, and while they could borrow or sell they would not think of doing anything of the kind.

It does not seem possible, in face of the circumstances depicted, to tender advice as to the measures and method of working under a Famine Code which seem likely to prove most effective in future supposing exactly the same state of affairs were repeated. The root of the evil seems to lie deeper than Famine Codes can reach to. It was the absence of grain in India or fictitiously high prices which caused the distress. One, speaking ignorantly and from a local point of view, is inclined to believe that there is some force in the arguments so often made by the Native press that grain should not be allowed to go so freely out of the land, but that either by an export tax, or otherwise, a sufficient reserve to meet periods of drought should be kept in the country.

The operations of any Famine Code could avail little in such a case as is under consideration. The patient labouring classes, accustomed to low diet and deprivation, merely lived the famine through as best they could, depending largely upon nature. No big work started at a troublesome distance would have tempted these people to crowd to it; they preferred to undergo debilitation near home. The succour they looked for was a relaxation of prices, and they waited till it came. They would do the same again according to custom under similar circumstances, and the only remedy to prevent these classes from periodically undergoing such periods of semi-starvation appears to lie in State measures taken to prevent the country being depleted of grain. If this is impossible, then it does not seem possible to prevent these classes from suffering as they have suffered before.

As to the land-owning classes, they, in a period such as is under consideration, are in no danger of failing to obtain food as long as their credit lasts. Had they had no capacity to borrow, the zamindars would have behaved differently from the great body of *kamins*. They would not have been able to live as the latter did, but would have appealed to the State for sufficient food, and *banias'* granaries would probably have stood in danger of being sacked. But though the credit they obtained was thus salutary for the time being, such a period of famine prices hastens on land alienation in favour of the usurers *per saltum*, and this, in view of the large normal amount of alienation, is a grave matter. Returns which were compiled show that during the famine period about 52,083 acres of land were alienated in six tahsils, of which about 18,750 were by sale: the alienations of course being in excess of those in ordinary years. The usurers take advantage of famine periods to play upon the necessity of the land-owners and to increase their hold upon encumbered land by every means in their power. No operations of a Famine Code can deal with this evil of alienation. Neither a system of gratuitous relief nor one of relief can meet the case. Relief can only come with the relaxation of prices. If sufficient grain cannot be kept in the country by any measures of administration to prevent

food from rising to famine prices for many months together, indebted and usurer-ridden land-owners, like the majority of the land-owners in the Sadr tahsils of Umballa, must continue more and more to encumber or part with their land. It does not seem possible for the State to step in and take the place of the usurer by lending money in such times. The revenue in a distressed village is suspended to start with, and if the village body corporate were given a loan to meet its needs, to be repaid along with the suspended revenue when harvests improved, recoveries could not be made without objectionable pressure and severity. *Capt. C. G. Parsons.*

To sum up, I am persuaded to say that it does not appear to me that any operations of a Famine Code such as we understand one can be of much avail to cope with such results as were exhibited in Umballa during 1896-97.

Written statement of evidence by NAWAB MUHAMMAD AFZAL KHAN, Khan Bahadur, *Deputy Commissioner, Gujrat, on the recent famine in the Phalia Tahsil of the Gujrat District.*

Nawab Muhammad Afzal Khan, Khan Bahadur.

Extent and severity of the distress.

1. The area affected was 562 square miles and its population 154,857. The distress was due to severe drought, failure of harvests and high prices. The rainfall was deficient, untimely and unevenly distributed. Prices were much higher than in other years. Preceding seasons had not been good. The agriculture is specially dependent on timely and sufficient rainfall. Small land-owners and tenants and *kamins* live from hand to mouth and are unable to tide over hard seasons. There has been no famine in recent years in the Phalia tahsil. The population is well off under normal circumstances,

Departures from the prescriptions of the Punjab Famine Code, which have occurred during the recent famine.

2. The only measure of State relief used during the late scarcity in this district was the opening of public works, and no material departures were made in practice from the detailed provisions provided for such measures in the Code. Gratuitous relief was not given to persons in their homes; nor were poor-houses opened in the affected area. Gratuitous relief was given to non-working children and dependants of labourers in the kitchens provided for them at the relief works.

Degree of success which has attended the measures adopted, considered primarily with regard to the relief of distress and the saving of human life, and secondarily with regard to economy.

3. When it was ascertained that the condition of the people in the Phalia tahsil was becoming critical, relief works were started to relieve distress and save human life. Relief measures were adequate to the requirements. The works were most popular and attracted large numbers of persons. The health of relief workers was remarkably good, and there were no deaths from starvation. The works organized were of permanent utility and beneficence. Rupees 41,036 were advanced under Land Improvement and Agriculturists' Loans Acts, and revenue suspended was R1,76,263.

Advice as to the measures and method of working which seem likely to prove most effective in future in these two respects.

4. I have no other measures to suggest. The excavation of the Jhelum Canal and the proposed Chenab Inundation Canal are the only works of permanent utility which can relieve the people of the affected area in the event of a future famine. All large works should be carried out under the Public Works agency, which constitutes the best agency. The Public Works agency should be assisted by the Civil agency in carrying out all duties of an administrative character, for which a professional knowledge is not required. The supervising staff should be large enough for the successful working of the arrangements for famine relief. The Civil agency should consist of salaried officials of Government as far as possible. Deputy Commissioner and Commissioner should have general powers of control when works are carried out under the Public Works agency.

Other recommendations thought likely to be useful in future famines.

6. I make the following suggestions under this head:—

(1) All applicants for relief should be required to obtain a ticket from the Circle Inspector before admission. Under the Code admission to *bonâ fide* applicants cannot be refused. To prevent people from coming to relief works who are not really in need, their circumstances should be enquired into by the Revenue officials of the tahsil in which they are resident.

(2) There should be only three classes of workers. It is necessary to retain Class D. All Class D people should be fed at the kitchens or sent to the poor-house. They should be given light work, such as grinding corn. Boys and girls over 12 years of age should be given C Class wages and work. Working children from 7 to 12 years should be given half the Class C wages and work. No wage should be given for the first day and full wages should not be given for the days occupied in classification and for rainy days. The minimum wage should be given for these days. Children of workers should be fed in kitchens and no cash allowance should be given for children. Cash allowance gives great inducement to people to bring children on the relief works with a view to enhancing the aggregate wages of the family. In the recent famine when food was substituted for money ration, there was a large reduction in the number of children, but when payment was made in cash, the number of non-working children was three-fourths the number of the workers.

(3) Residence upon a relief work should be a definite condition of relief. It constitutes a fair test of necessity. Residence will not prevent people from coming to relief works if they really feel the pinch of distress.

I would fix the greatest distance at 40 miles when accommodation is provided on the relief works and 10 miles when they return every night to their villages. I would not admit persons to relief works if they refuse to attend at the distances stated.

Full task should be exacted from able-bodied persons and short wage should be given for short work. The wage should not be more than sufficient for the purpose of maintenance; liberal wage attracts persons who do not require State relief. I would propose 12 chattaks for Class A, 10 for Class B and 9 for Class C. It is unnecessary to calculate wages according to the cost of the component parts of a day's ration.

(4) I am not in favour of piece-work system. It would reduce cost of establishment. I would not make payment for work done to the head of the gang.

(5) Kitchens should be opened to relieve destitute persons in case of real distress.

(6) I am not in favour of giving loans for purchase of food. People should be required to submit to the self-acting test of accepting work on a relief work.

(7) Orphans should be sent to private orphanages at the end of famine and the cost of their maintenance paid by the State. They should not be maintained from private charitable relief funds.

(8) Only small land-owners and tenants who are unable to get *takavi* from Government should be helped under Object IV. Relief should be given before the commencement of the agricultural season. Those who can get *takavi* from Government on the security of their land should receive no money from charitable relief funds. Grain doles under Object I and cheap grain shops under Object III are the best form of relief.

(9) Wanderers should be put on relief works or sent to poor-houses.

(10) When large numbers of persons are employed on relief works and local stocks are depleted I would favour import of grain by Government.

(11) When failure of crops has caused great rise of prices and expectation of a famine in a district, it is a good policy to open works under the Public Works agency on ordinary terms. It is also desirable to make provision for special employment of labour by the Public Works Department on ordinary terms in order to assist the very poor. I would also recommend opening of small works under the Civil agency as a means of employing respectable zamindars. Village tanks are useful for relief of this nature. The tanks would be of use for watering cattle.

Capt. H. S. P. Davies.

Written statement of evidence by CAPTAIN H. S. P. DAVIES, *Deputy Commissioner, Delhi, dated 11th March 1898.*

The principal departures from the Famine Code were in the classification of relief workers and in the admission of dependants.

After a short trial the classification according to the Code was abandoned and workers were classified under either Class B or Class D. All diggers were entered in Class B and received the wages of that class, which averaged two pice more than those in Class D. My opinions regarding Mr. Higham's proposals were given in my letter No. 2, dated 2nd January 1898, to Revenue Secretary.

When work was started near the city it was found that the proportion of women and children as compared to men was very large, and enquiry showed that the husbands of these women were in regular employment elsewhere, so orders were issued that such women were not to be admitted without their male belongings. The order was not carried out with any strictness, but it had some effect in reducing the number of women.

The relief works in this district were successful in relieving distress and in saving human life, but were not economical.

It is, I think, most necessary that every economy in the matter of establishments should be effected in relief works. The establishment entertained on the Agra-Delhi Railway—a work under the Department of Public Works—seemed to me to be excessive. I think that if the Patwari and Kanungo establishment had been more largely used for the clerical work it would have been more economical, even if these men had received some small allowance.

The number of dependants and children was very large, so the charge for unproductive work was considerable. I consider that if no payments are made for children and dependants in cash there will not in future be that eagerness to come on the works. I would suggest that a nursing mother should be paid the wages of a digger, and that her children should neither be entered in the lists nor paid anything. Those children who are considered too small to do efficient work should be fed with the dependants in a kitchen attached to the work. But children whose parents or guardians are not on the work should not be received.

I think that the opening of kitchens before village relief is commenced would afford a fair criterion as to the real distress among the non-efficients.

It is the general impression that work under the Famine Code is more expensive than ordinary work, and it seems to be questionable whether it would not be more economical to commence ordinary works in a tract where scarcity is known to exist. It is the practice now when scarcity is known to be impending to stop all expenditure that is not absolutely necessary while waiting for the scarcity to turn into famine, I think it might be possible, though I speak with diffidence, when there is scarcity in only one portion of a district, to ward off famine for a time by concentrating the expenditure of the local funds on ordinary works within that tract, at the same time the different Government Departments should co-operate for this end in time of scarcity.

As regards famine works, I am of opinion that as a rule small village tanks should not be included in such works. I have no objection to tanks at some distance from the village site which benefit several villages, nor to large tanks near a public thoroughfare, but I do not think that public money should be spent on a small tank which is regularly used exclusively by the village. Work on such tanks is of course very popular, but their maintenance should be regarded as the duty of the village. In time of scarcity I would suggest as a means of warding off famine, that grants, repayable by easy instalments, be made to villages requiring them for the specific purpose of cleaning their tanks. I have no doubt but that villages would readily take such grants and would expend the money on the work for which it was granted. The money should be recovered in future years, like suspended land revenue, in instalments according to the produce of the crops.

Written statement of evidence by KHAN SAHIB GHULAM MUHAMMAD HUSSAIN KHAN, B.A., *Municipal Commissioner, Delhi, and Joint Secretary, Charitable Famine Relief Committee, Delhi, dated 16th March 1898.*

Khan Sahib Ghulam Muhammad Hussain Khan.

This document is based upon the report of the working of the Charitable Relief Fund Committee at Delhi during the year 1896-97, prepared and despatched by us, the Joint Secretaries, on 13th November 1897, to the Provincial Committee at Lahore.

Delhi is pre-eminently a place where the kind of relief proposed under the 3rd head of enclosure A of the Government Notification No. 64, dated 23rd December 1896, was required. Almost all our work has been performed under this head and the bulk of the money expended in its promotion. The artisan classes of Delhi belong to the *sufed-posh* class (respectable poor). They are descended from wealthy and influential families of the Muslim community who flourished before the Mutiny of 1857. They could never have benefited from the relief works started by the Municipal Committee outside the City. Nor would they have agreed to publish their names in accepting relief from the Government in the delivery of which sufficient secrecy could not have been observed. There was one other rather serious objection to their taking to the earth-digging outside the City, which would not only have degraded them in the eyes of the society they moved in, but also injured the fineness of their dextrous fingers, so essential for the refined and high order of art they pursued. There is also a large population of destitute Mahommedan widows and deserted wives who entirely subsist on the needle and *gota* work doled out to them by Hindu *mahajans* and gold-wire firms. On account of the suspension of Hindu marriages the demand for this commodity had ceased, and consequently the above-mentioned women-folk were left in a pitiable plight. Famine came as an additional and aggravating calamity. It was therefore essential in all humanity to reach out help to these miserable human beings.

The system of gratuitous relief, which we introduced in Delhi in the first week of November 1896 on a pretty large scale, and which lasted throughout the year 1896-97, has been a fair success. In the majority of cases it reached the right people, and considerably helped them to tide over the bad times. We relieved nearly 7,000 respectable poor men and women, by far the largest part being Mussalmans, per mensem. Had all the Ward Sub-Committees diligently and sympathetically co-operated with the Executive Committee, our work would have been a better success. When we compare the population of the different municipal wards and also the lists of the apportioned relief tickets for each ward, we discover startling disparity in them. The population of ward eleventh is 12,657 souls, while that of the thirteenth is 30,180. Both are nearly Mahommedan wards, and hence both have a comparatively poor population. Now in the eleventh ward 1,341 relief tickets were issued in October 1897, while the biggest ward of the city, the thirteenth, had only 471 relief tickets issued in the same month. This state of things continued to the end of the work. The apparent apathy of some of the Ward Sub-Committees was really disgraceful.

In the heart-rending experiences of this calamitous year, I personally became cognisant of many cases of sheer destitution who began by refusing to accept relief, but in the long run, on the pinch of distress becoming acuter, were forced to apply for it. In giving relief to such persons I promised them not to disclose their names even to my much-esteemed colleague Reverend S. S. Thomas of the Baptist Mission. Some respectable Mussalmans who move in good society and sit side by side with us in the assemblies of our community were so hard-pressed by want at this time that they at length sought me in my house late in the night with their faces covered and tears in their eyes. They stated that all their things were sold, saving the holy Koran, and they were in debt, and now they knew not how to get on with a whole family of several children. The relief tickets of course were given them with the promise that profound secrecy would be observed as regards their personality. I know more than a hundred cases in the different parts of the city where our fund has actually saved the sufferers' lives and honour.

In my opinion we can safely claim to have saved some 15,000 souls from starvation and dishonour every month during the twelve months our work endured. We are afforded another evidence of the success of our measures in saving life when we glance at the records of deaths during the months of August, September, October, November and December in the municipal boundary of Delhi in the last five years. Here we find with satisfaction that the mortality of these months of 1897 compared very favourably with the corresponding period of the preceding five years. The profound gratitude with which these people who had their lives

and honour saved by our help now speak of the "Sirkar" and us, the circle members of their wards, whenever an opportunity is afforded them, clearly bears me out in my conclusions. I believed that R1,331-7-8 as the cost of administration of a fund of some seventy thousand rupees is not a large item. It will come to nearly 2¼ per cent. of the whole sum expended. The fact is therefore clearly established that we managed the funds with a special eye to economy. The only other feasible plan which might have shown better economical results was the system of cash relief to the respectable poor. For various local reasons this was not practicable in Delhi. The reckless habits of the sufferers prevented us from so much as giving it a trial. There were other reasons too.

There was one great and glaring drawback in our scheme of gratuitous relief, which we had foreseen but which we could not remedy. The relief which we gave the poor people gradually made them too much to depend on our help. They gave up all search after work. The attempts we made to provide against this demoralising effect of our relief measures by issuing cheap-rate tickets in large numbers was a failure in many cases. I regret to state that many cases of selling cheap-rate tickets to the *bania* for a nominal consideration were detected by both of us, Rev. S. S. Thomas and myself. We were quite powerless in arresting this practice, which continued to sully our charitable work throughout the year. Many devices were tried, but all to no purpose. For the future, therefore, I strongly deprecate limiting our efforts, after mitigating the distress of the famine-stricken poor of Delhi, to gratuitous relief alone. The plan that I would prefer for future famines is this. That a portion of the available private funds, together with the funds granted by the Government from Public Treasury and the available funds of the Municipality, be all invested in starting factories of *kandla* embroidery and needle-work in various parts of the town, managed and conducted by a Relief Committee of few but earnest gentlemen of the three communities; the Mahommedan element may prevail since the sufferers during future scarcity years may also in most part belong to this community. From these factories piece-work may be easily doled to *parda* women, either through Zenana Mission agency or other reliable female agencies, and to respectable men, who are willing to work and for want of which they may be in a helpless condition. Then the remaining portion of the private funds be devoted to starting relief shops of food-grain only for the relief tickets to be cashed there. The relief tickets of both the free and the assisted system be maintained as heretofore. The free tickets must be very few and be given out to the cripples, respectable orphans and widows who by their station in life are not in the habit of earning their livelihood. The cheap rates may be furnished to a large class of able-bodied men and women who work at the relief factories' goods and thereby earn a pittance not sufficient for their daily expenses. This system if vigorously and properly enforced would be exceedingly good for the moral status of the sufferers. The habit of accepting alms and living upon the bread of idleness is the bane of native society. It must be discouraged with no half-measures. With the experience of one hardworked year I can confidently assert that the moral effect of our relief measures in many cases was very far from satisfactory. Many persons who were in the habit of living upon the honest product of their own labour before the famine are now, while plenty of work is available, loth to go back to their former honourable, though hard, life. Some of them actually send begging letters to the wealthy people of the city.

In view of the acute distress which prevailed in the town by the closing week of September 1896—and the Government had also recognised it—wonder how it was that the Government did not start some work on their own account for the artisan classes of Delhi City. It was once understood that enquiries were being made, but I do not know why something was not actually tried. I admit that a very large sum was required for starting such industries, and it may be owing to the hugeness of the undertaking that it was not ever tried. Considering that Delhi is a very important city of the British Empire, it deserved special favours on the part of the Government. I am afraid the Government neglected a duty in doing nothing for starting some industries for the respectable sufferers from famine. The question of funds might have been considerably facilitated if charitably disposed banking houses of Delhi were invited to come forward with their vast resources. The Government grant when added to the sums advanced by the bankers (*i.e.*, of course without interest and with the promise of being recouped in case of loss by the Government) and possibly a portion of the funds at the disposal of the Charitable Relief Committee may have been sufficient for the undertaking. The sale of articles or stuff prepared by the poor workers, now when the demand for those goods is fast reviving, would probably have more than covered the pecuniary losses then incurred. I therefore believe that our relief measures in part overlapped the duty of the Government. The Charitable Fund was successful enough to keep them alive at the expense of their moral status.

Khan Sahib Ghulam Muhammad Hussain Khan.

Under the second head of the Government Notification of December 1896 we hardly needed any money and did any work. The peculiarities of the urban population does not admit of orphans being left unclaimed. Fortunately our measures were so successful in life-saving that the mortality rates of the town were kept down to its normal proportion. Hence the entire absence of the results that invariably follow the calamity of a famine in a purely agricultural district. I may also add that I do not quite understand why the maintenance of the orphans has so completely been thrown under the category of the obligations of the Charitable Relief Fund. To keep them alive is to my mind the duty of the Government. The duty of the Charitable Fund begins afterwards. We may justly be required to supply their other wants, education, etc. We can thus supplement the Government help. Under the first head we spent more than R6,000. More than 3,000 respectable poor and others who were in receipt of help from Municipal relief works were furnished with blankets and *lihafs* in December 1897. This form of relief did an immense amount of immediate good to the poor people, who might have suffered terribly, if not perished in the winter months.

I also observed that the gratitude invoked by this kind of relief was very deep and sincere. The recipients of the warm clothing were so much affected by this bounty that often they there and then lifted up their hands in prayer for the "Sirkar."

Under the same head we spent R800 in giving relief to respectable poor women attending the Zenana Hospital at Chandni Chowk, Delhi.

Under the fourth head of the said Notification of December 1896 we spent R4,509-6 in advancing small sums to the farmers for the purchase of cattle. Under this head the urban population of Delhi also needed extensive help. Mr. Thomas and I were entrusted with the enquiries in this direction. I am very sorry to state that we did not push our enquiries with the required diligence, and consequently we came to the wrong conclusion that nothing was needed by the artisan classes on that score. Afterwards many authenticated cases turned up where small donations might have started afresh the broken-down artisan in his profession.

I may be allowed to express my views upon certain other questions involved in the enquiry of the Hon'ble Famine Commission. It was once proposed to open cheap grain shops for the poor classes of the City and to devote the whole amount of the charity funds to this undertaking. A few were actually opened by private Hindu and Mahommedan gentlemen. With us the proposal fell through owing to the vastness of its probable cost.

Besides, the trading classes, against whose vagaries this proposal was aimed, are too subtle, and what is worse, not specially reputed for their business morality. This attempt at regulating the avarice of the corn-dealing guilds in my opinion cannot be a success unless the Imperial Government passes a wise law by which certain wholesome restrictions be incumbently placed upon the trade of food-grain. It must be understood that food-grain is an article of trade upon which the lives of millions of Her Gracious Majesty's half-starved subjects are dependent. It is so different from other articles of trade. One other thing I beg to suggest, and to this invite the attention of the Hon'ble Commission. When a famine may seem to threaten India the Government should immediately prohibit the export of corn to foreign countries and thus reserve the stock of corn for exigencies of our own country. This embargo may be removed as soon as the fears of famine have been dispelled, but in case of famine supervening it must continue so long as the calamity lasts.

I do not know how far I am justified in opening on such vital subjects of the Imperial policy, yet I dare suggest that the *badhni* system in corn-dealing circles, which has gained in popularity of late, must be made unlawful by an Act of the Government, as the rain-gambling practice has very wisely been put a stop to by an Imperial legislation.

Written statement of evidence by MISS A. THEOBALD, *of Bhiwani, dated March 1898.*

Miss A. Theobald.

Statement concerning relief work carried on among the parda *women of Bhiwani during the Famine, 1897.*

The relief works which we carried on through ten months of famine, that is, from November 1896 to August 1897 inclusive, were chiefly in aid of distressed *parda* women in Bhiwani, and a few of the villages round. Apart from the money which was supplied to us liberally from the Lahore Central Famine Fund, through the Deputy Commissioner of our district, Captain Dunlop-Smith, our work was carried on quite unofficially, according to our own discretion, and not to the rules laid down by the Government Famine Code. Therefore perhaps I am scarcely qualified to remark upon the points to which our attention is specially directed in the Secretary's letter No. 93, paragraph 4.

From our experience of the need of this class of women, and of the great success of work carried on for their relief, I would suggest that in case of another famine special provision should be made by Government for the carrying on of such work in every city, and not merely for gratuitous relief to be afforded them. (See Famine Code, paragraph 102, page 35). Not one of our women received gratuitous relief, except during September, when we were obliged to give up the work, and prices still being very high we arranged for the distribution of eight annas a week to each woman.

Some 250 women were supported during the worst of the famine months by spinning, embroidery and needle-work, by which they earned on an average two annas per day. About 12 men were employed in cleaning and preparing the cotton to be spun, and 12 more in weaving the spun thread into cloth.

A complete suit of warm strong clothes was given to each woman when the relief work was closed. These themselves had been entirely produced by the relief works; also some 200 garments supplied by us to the poor-house of Bhiwani. The raw cotton was cleaned, spun, woven, dyed, and finally made up into garments by those whom we employed. These were women who were either of too good caste, or too old and feeble for the public relief works, which successfully employed younger, stronger women of lower castes.

For four or five months we had a kitchen in the centre of the City, from which cooked food was distributed daily to people who had come in from villages in search of help. Those who gathered daily for this distribution were mostly in some way or other incapacitated for work, blind, lame or diseased. Of these we passed on those who could be persuaded to go to the poor-house, as far as possible, restricting this relief to passing wanderers of whom the City was full.

My experience is that the majority of the people are eager for work, and would rather have it supplied to them than gratuitous relief. Nearly all were truly grateful for the help given them, and there were scarcely any complaints when we stopped our work on the re-opening of the market industries, though of course we had been giving more than the regular bazar rates in payment.

I should mention perhaps that we kept a grain shop, which helped from 40 to 50 struggling families through the famine. Ticket-holders were supplied with grain at the rate of two seers to the rupee in excess of the bazár rates whatever they might be. The tickets were carefully distributed to deserving, needy families, and were greatly appreciated. The plan worked well.

The management of famine poor-houses must depend largely upon the superintendent in charge. As one of the appointed visitors of the Bhiwani poor-house I would make one or two suggestions. Our poor-house was certainly not well managed. For such an institution, a well-paid capable superintendent is a necessity, or the rules for the management of poor-houses laid down in the Code cannot be carried out. To prevent abuses, inmates when once admitted should not be allowed exit from the house until finally discharged. Not enough discretion was used in admitting candidates; again and again the house was filled with able-bodied men and women, who ought to have been on the public relief works. Regular Committee meetings of the visitors should, I think, be enforced, and their suggestions and orders carefully carried out by the superintendent.

In conclusion, may I say that we cannot be grateful enough to our Deputy Commissioner and his Assistants for their unfailing help, counsel and sympathy during the long sad months of famine.

Written answers to the Commission's questions by BRIG.-SURGN.-LIEUT-COLONEL W. A. CRAWFORD ROE, F.R.C.S., *Sanitary Commissioner, Punjab, dated the 1st April 1898.*

Brig.-Surgn Lieut. Coll. W. A. Crawford Roe.

259. Has the population of your Province increased since the taking of the census of 1871? If so, will you state what this increase has been from 1871 up to the end of 1896, this latter being probably the latest year for which the complete figures are available?—In this Province the first census was taken in 1868, again in 1881, and the last census in 1891. In 1868 and 1881 the returns showed the following numbers:—

1868	17,487,125
1881	18,842,264

being a total increase of 1,355,139 in 13 years, about 8 per cent. for the whole period, or ·6 per annum.

In 1891 the population was returned as 20,553,982, showing an increase of 1,711,718 in 10 years, about 9 per cent. for the period, or 9 per annum.

No census having been taken since 1891, I here give the total births and deaths from 1891 to 1897 inclusive:—

Number of births registered . .	5,766,595
Number of deaths registered . .	4,832,967
Increase	933,628

or ·6 per cent. per annum increase during the 7-year period.

Roughly estimated, therefore, the present population of the Punjab amounts to about 21,500,000, or an increase of 22 per cent. in 30 years.

260. Is there any evidence of a continuous increase in the birth-rate or decrease in the death-rate?—From the birth-rates recorded since 1880 there is evidence to show a continuous increase in the birth-rate; and, as registration has considerably improved of late years, there is, in my opinion, a real and steady increase of population taking place in the Province. The death-rates during the same period have not fluctuated to any great extent, and have only twice exceeded the birth-rates, *viz.*, in 1890 and 1892, both years being very unhealthy, 1890 showing the highest mortality from fever on record, and 1892 the worst cholera epidemic which has ever visited the Province since registration was established.

As registration of births only became compulsory in 1880, I here note the average birth and death-rate for 18 years (including 1890 and 1892) for the sake of comparison, from which it will at once be seen that the population has been steadily increasing every year, as the average birth-rate has been 39 while the death-rate only 32 per thousand.

261. What has the average increase of population been per cent. per annum for each year included in the period mentioned?—About ·7 per cent. per annum since 1868.

262. Do you attribute this increase solely to the natural and unrestrained fecundity of the people, or are there other, and if so what, additional causes?—I am inclined to attribute the increase almost entirely to natural fecundity and to the absence of widespread epidemics of any kind. So far as I am aware, emigration and immigration being about equal, these factors need not be taken into consideration as exerting any very great influence on the increase. The people, as I know them, are fairly well nourished, and in many parts are a physically fine race, and under these circumstances natural fecundity has full play, and, in my opinion, is the real cause of the steady increase.

263. What effect on the growth of population in India would you assign to the enduring peace maintained within our borders, to the suppression of infanticide and widow-burning, to sanitary works and improvements, to the extension of vaccination, and to the strenuous endeavour to prevent the loss of a single life in periodically recurring famines?—Prohibition of widow-burning and infanticide may in some measure have contributed to the increase; and vaccination has certainly largely influenced deaths from small-pox; but the amount of influence exerted is difficult to estimate, and the first-named cause, I should say, might be left out of consideration in the case of the Punjab. With regard to sanitary improvements, the drainage and general cleanliness of the large cities and towns are decidedly

better than they were 20 years ago, and this being so, their inhabitants are living under healthier conditions, which must necessarily more or less influence the death-rates of these places, but when I look at the villages in the Province, I must at once say that I see no improvement as regards sanitary condition, and I attribute their general healthiness to the fact that they have air, light and sun to preserve them from the evil effects of their surroundings The villagers live an out-door life, there is but little over-crowding, and they have always a fair food-supply, and with the exception of an occasional outbreak of cholera, there is no influence at work which either tends to shorten life in a general sense or to sweep them away in large numbers, and when any fear of famine is present, the Government at once steps in to prevent its effect being disastrously felt by the poorer classes. Personally I have never seen anything like a severe famine during the 28 years I have served in the Province. Scarcity and dearness of provisions I have known on a good many occasions, but never a real famine in the usual acceptation of the term.

268. The immediate effects of irrigation works and improved methods of cultivation being assumed to increase the production of food for man and beast, what, in your opinion, would their more remote effects be? Would they, in a population of great fecundity and exercising no restraint on such fecundity, tend to cause the people again to multiply up to the limit beyond which the soil could not further support them?—This question I answer in the affirmative. Given an unlimited fecundity, a plentiful food-supply and an absence of wars and pestilences, the population is bound by every natural law to multiply up to the limit beyond which the soil cannot further support the people. This would not matter, nor give cause for apprehension, if the surplus population could find exit, but emigration to other lands is practically, and in some cases forcibly prevented, and this being so, it is not easy to prognosticate the future of any country similarly situated, especially if it contains all the elements of disorder within its own boundaries.

Brig.-Surgn. Lieut.-Col. W. A. Cradford Roe.

272. Irrigation, we assume, increases the productiveness of the soil; it is also acknowledged to be concerned in the generation of malaria in many extensive tracts of the country. Malaria, we have proof, lessens the fecundity of the people. Do these facts suggest to you the involuntary establishment of an equilibrium between the population and the food production of irrigated tracts? Would such equilibrium, brought about in the way which these facts suggest, be a result to be desired?—No. So far as this Province is concerned, the mortality is not so great as is usually supposed in the irrigated tracts: except in certain districts, the mortality in irrigated tracts is not very much greater than in non-irrigated lands, by which I mean lands not watered from canals. If equilibrium between the increase of population and the food production of the land could be established by means of irrigation, *I do think it would be a result very much to be desired*, but as the question is a very wide and difficult one, and turns upon a disputed point in political economy as to whether population should be encouraged beyond certain limits, it is perhaps better that I should not express my views, as they do not accord with those held by many excellent and well-meaning humanitarians.

Written statement of evidence by Miss Phillips, *of the Church of England Zenâna Society, Peshawar.*

1. In Peshawar where, although there was no actual famine, there was great distress owing to the high prices that prevailed, those natives entrusted with the task of distributing tickets in many cases refused to give them without something equivalent to *dastûri*. Sometimes they demanded one-eighth, sometimes more, for a series of tickets. Naturally those in actual distress were unable to comply with this extortion, and therefore were not relieved. On the other hand, the well-to-do friends and relations of the distributor by paying a small sum obtained tickets entitling them to flour at reduced rates or even free!

2. Much flour was misappropriated in the following way:—The tickets were made out for certain days (say, for the 5th, 10th, 15th of a certain month). The holder would go early on the morning of the 5th to the shop indicated. After some delay, a certain number of the ticket-holders present would receive their flour, the others being sent away "as the flour had come to an end!" The same thing would occur on the 10th or 15th, so that instead of receiving flour three times within a certain period many of those entitled to relief would only get it once or twice. Having had the tickets brought me many times by women who failed to obtain flour, I went on foot to the street in which the distributions were made, and standing amongst the crowd, which was closely packed, found the statement to be true. I am inclined to think that a very large proportion of the flour distributed got into the wrong hands. No doubt European supervision is difficult to arrange; but it was badly wanted. "Every man for himself" was a motto specially in force at the time.

Miss Phillips.

3. I would suggest that in future times of scarcity needlework, etc., should be provided for starving women. Through the kindness of private individuals I was enabled to provide a large number of women daily for some time with coarse sewing, spinning, nawâr-making, etc. There were sometimes as many as 200 employed, and daily many were turned away. They came early in the morning and stayed until sunset for two annas a day. They were willing to do anything; and were none of them of the beggar class. Many *parda* women were helped also by work in their own houses; but many more needed it badly. There was much suffering amongst strictly *parda* women who could not of course stand in the street to have their names called over. I would suggest that in future some *parda* house or court-yard should be assigned for distribution to respectable poor Mahommedan women. Many of them could go for relief to such a place. And the scarcity fell most heavily on such women last winter.

Written statement of evidence by L. Chhajju Ram, *Contractor, Karnal, on the formation of rings by* Banias *in time of Famine.*

In a big bazar like that of Karnal it is impossible to form a ring. There are about 80 small shops and 20 of Arhtis. The *banias* here receive telegraphic and postal information regarding the rates prevailing at the large trade centres, such as Dehli, Cawnpore, Allahabad, Bathinda, Ludhiana, etc. This is borne out from the fact that different rates prevailed on the same day, *i.e.*, there was one rate in the morning and another in the evening, as for instance more than one rate prevailed on the following dates:—

Date.	Morning.	Evening.
	Srs. ch.	
11th Sept. 1896	13-3 per rupee	12 seers per rupee wheat was sold.
25th Sept. 1896	10-4 „	9¾ „
30th Sept. 1896	9½ seers „	9¼ „
6th Nov. 1896	8¼ „ „	8 „
	Srs. ch.	
9th Nov. 1896	7-10 „	7½ „

Another reason of non-formation of rings is the greed and disagreement which characterises the *banias* of this place. Suppose a *bania* bought during the period of scarcity 1,000 maunds of wheat at 12 seers in the hope of raising a profit on it. On a day when the rate was 9 seers, the *banias* tried to form a ring to sell 7 seers, but the man who has a store of 1,000 maund thinks that if I join the ring and no one offers to purchase his grain on that day, he will run a great risk, because if the rate falls to 10 or 11 seers the very next day there will be a loss in his profit.

L. Chhajju Ram.

In this way he never agrees, and sells out his store at the rate more acceptable to the public, *i.e.*, he will sell his grain at 9 seers though the ring's leaders may persuade him to observe the condition of 7 seers for that day.

The cause of very high prices in this district during the scarcity may be sought in quite a different fact. The *banias* are chiefly guided by the prospects of harvests.

During the period of scarcity when all hopes of the harvests failed, the big dealers shut up their stores in the hope of selling it at a high rate, when the same stores of the retail sellers were exhausted.

When the small stocks are unable to meet the demand of the public, it is quite natural that the price should rise to a

L. Chhajju Ram.

very high figure. The owners of the large stocks sold their grain at the time when the rates had already risen.

In the absence of any prospect of new grain the rates cannot fall, even if there is a large quantity of grain in stock.

The dependence of rate on the prospects of harvest is exemplified by the fact that, though no new grain has come to market now, still the rate of grain has considerably fallen, *i.e.*, wheat now sells 13 seers in place of 10 seers and gram 17 seers in place of 12 seers. This is totally due to good prospects of the present rabi.

The rates of the retail sellers depend on the wholesale rates, the retailers purchase their stock from wholesale sellers and sell it at a higher rate which gives them a small profit, but when the former refuse to issue their grain to them, then they begin to sell their limited stock at a very high rate, then the wholesale sellers begin to sell their stock at those rates, this is all private consideration and is due to non-receipt of new stock from outside.

The rate at Karnal is not fixed by any *Panchyat* or *Arhti*. It depends on the information received from other places, and also on the quantity of grain received at the market on each day.

When the consignment of grain is received at the market, the purchasers collect at the site of the article and then the rates are bid as at auction. These bids chiefly approach the rates at other places. Again, if small quantity of grain or no grain at all is received, the rates begin to rise and continue high so long as no large stock comes to market.

QUESTIONS DRAWN UP BY THE COMMISSION FOR THE GUIDANCE OF WITNESSES.

AS TO THE EXTENT AND SEVERITY OF THE DISTRESS.

1. In your $\frac{\text{province}}{\text{district}}$ what was the area affected and its population?

2. To what was the distress due? To local failure of the rains and of the harvests, or to abnormally high prices, or both?

3. (*a*) Describe the extent to which the rains and the harvests dependent on them failed, as compared with the normal state of things.

(*b*) Were prices of food-grains much higher than in other years? Were they as high as, or higher than, those experienced in past famines?

4. Up to the time of the failure of the rains, what had been the condition of the affected area? Had preceding seasons been favourable or the reverse?

5. Under normal circumstances may the population of the affected area be considered to enjoy a fair measure of material well-being? Is there any section of the population in it which from special causes is ordinarily in an unsatisfactory and precarious condition? Is it relatively large?

6. Is the agriculture of the affected area specially dependent on timely and sufficient rain, owing to any peculiarities of soil, crops, absence of facilities for irrigation, or the like?

7. To what extent has the population of the affected area reserves of money or food for its support in the event of failure of one or more consecutive harvests? What sections of the population have not such reserves, and what proportion of the total population of the affected area is so situated?

8. How does the late distress compare in respect of its extent and severity with that experienced in any other famine of recent years in the same locality?

9. Is there any reason to suppose that the extent of crop failure, or the degree of distress, or the absence of resources on the part of the people, was under-estimated or over-estimated on the present occasion at any point of time? If this was the case, did it affect the character or amount of relief provided?

AS TO THE SUFFICIENCY AND ECONOMY OF THE RELIEF MEASURES.

10. The Famine Commission of 1879 appear to have held the opinion that the number of persons on relief in the worst months of a famine ought not to exceed 15 per cent. of the population of the affected tract (paragraph 75). Does this standard coincide with your experience? Is it liable to be exceeded in particular tracts, while being a fairly correct standard of relief as applied to the whole of the affected area in a province, some portions of which would be less distressed than others?

11. How do the relief figures of your $\frac{\text{province}}{\text{district}}$ in the late famine compare with the standard of the Famine Commission? If there are cases in which the standard was largely departed from, can you account for them?

12. Having regard to what you consider to be a fair standard of relief under given conditions, do you think that in any part of your $\frac{\text{province}}{\text{district}}$ the proportion of the total population relieved was larger than was necessary to prevent loss of life or severe suffering? Were persons relieved who were not really in need of relief? And, if so, to what do you attribute this?

13. On the other hand, were there any cases in which a larger proportion of the population might have been relieved consistently with the object of saving life and preventing great suffering? If so, what was the reason? Was it due to the attitude of the people themselves, or to defective or insufficient or ill-adapted relief arrangements?

14. If the relief arrangements were defective, insufficient or ill-adapted in any cases, was the cause of this circumstance avoidable or not?

15. Judged by the mortality of the famine period, has the relief given been successful in its object? If the mortality has been in excess of the normal, is there reason to think that this might have been prevented by more extensive or more timely relief measures?

16. Were any changes made at any point of time in the scheme of relief which was followed by a large decrease or increase in the numbers on relief? Do you consider that such increase or decrease was a direct or indirect result of such changes, and that they had the effect of excluding from relief persons really in need, or of bringing on to relief persons who did not really require relief?

17. Can any connection between such changes of system and the death-rate be traced?

18. The Famine Commission (paragraph 111) considered that the best safeguard against profusion on the one hand and insufficient assistance on the other was to be found in prescribing self-acting tests by which necessity may be proved. Do you consider that this principle has been observed to the fullest practicable extent in the late famine so far as your experience goes?

19. The chief test was held by the Commission (paragraph 111) to be the exaction of labour from all those from whom labour can reasonably be required, the labour being in each case commensurate with the labourer's powers, and the wage not being more than sufficient for the purpose of maintenance. In the late famine, were all persons who could do a reasonable amount of work required to work as a condition of receiving relief?

20. The phrase "who can do a reasonable amount of work" was intended by the Famine Commission (paragraphs 133 and 146) to include women and children, so far as they are healthy and capable of labour. Have these classes of persons been subjected to the labour test in your province?

21. The Famine Commission (paragraph 111) considered that if this principle be observed, the numbers of destitute persons to whom the test of labour could not be applied would be "comparatively small." What has been your experience in the late famine as to the numbers of persons relieved, otherwise than through the operation of a labour test, in comparison with (1) the total population of the affected tract; (2) the numbers relieved on works. Have they been comparatively small? If not, what is the explanation?

22. With regard to the labour-test, have the conditions of the task and the wage been such as to constitute a stringent test of necessity? Has the task been a full one, considered with reference to the working capacity of each person? Has the wage been more than a bare subsistence wage, regard being had to the fact that it was open to the several members of a family to obtain separate relief.

23. The Famine Commission (paragraphs 128 and 146), while objecting to a "distance test," as a condition precedent to a person being received on a relief work, considered that one large work in each sub-division would prove sufficient, and that most of the workers would find it necessary to reside on the work. Have the relief works been more numerous than this, and have the workers as a rule resided on them or not? Is residence upon a relief work disliked by the people, and does it constitute an effective and a fair test of necessity?

24. Can you give statistics showing the highest percentages on the total population of persons relieved on works

("dependants" being excluded) attained in the period or periods of maximum pressure?

25. How do these percentages compare with those attained in previous famines? If they are considerably higher, what is the explanation?

26. It has been alleged that in the present famine the people have resorted to relief works with greater eagerness and at an earlier stage of distress than in previous famines. Is this your experience, and if so, do you consider this due to the greater liberality of the terms of relief as compared with those in force in former famines, or can you assign any other reason?

27. Was "gratuitous relief" mainly given through the medium of poor-houses in which residence is a condition of relief, or in the form of cooked food in kitchens where residence was not a condition of relief, or by means of doles of grain or of money to persons in their homes?

28. The Famine Commission (paragraph 140) recognised that the "village system," or the grant of relief in the homes of the people, involved "the risk of a too free grant of relief." Do you consider that the risk was effectually prevented, and that gratuitous home relief was strictly confined to persons who were in real want and who belonged to the classes specified in your Code?

29. Has gratuitous home relief been given more largely and at an earlier date in this than in any former scarcity? If so, give the reason and say whether the change has been beneficial. Has it saved lives and kept villages and households together? On the other hand, has it in any way demoralised the people, by making them more ready to accept charity, or by weakening the moral obligation of mutual assistance?

30. State the gross cost of direct famine relief in your $\frac{\text{province}}{\text{district}}$. State the number of persons relieved (in terms of units of one day's relief), and the cost of relief per unit. Compare the cost with the cost of relief in previous famines. Having regard to the comparative severity of the late distress, has relief been economically administered on the present occasion?

31. What indirect relief, in the form of loans or suspensions and remissions of land revenue, has been given? Can you say how the amount of such relief compares with similar relief given in former famines?

32. What is the net result of the famine, alleviated as it has been by relief measures, on the economic condition of the population of the $\frac{\text{province}}{\text{district}}$, distinguishing between the land-owning class, the cultivating non-proprietary class, the agricultural labourers, and the trading and artizan classes? Have these classes respectively been permanently injured, or will they speedily recover their former position?

33. Is there any important matter in which the scheme of relief-measures prescribed by the Code is seriously defective, or fails to meet the requirements of a particular class or particular classes of the community.

As to the arrangements existing for ascertaining the imminence of scarcity.

34. Do you consider that the arrangements existing in your province for ascertaining and reporting failure of rainfall and crops are sufficient? Can you suggest any improvement on them?

35. If no revenue village organisation, such as patwaris, is maintained by the State in your province, how is information as to the cropped area and the condition of the crops ascertained?

36. Can the crop-returns be relied on as regards (1) the area and kinds of crops actually sown: (2) the extent to which sowings have failed: (3) the condition of the crops?

37. Are the returns obtained within a sufficiently early date after the crops have been sown to be a guide, when distress is apprehended, to the extent of the apprehended distress?

38. In the late famine were the relief arrangements of each district largely based on the agricultural information given by these returns?

As to the extent to which the prescriptions of the Provincial Famine Code have been departed from or have been found to be unsuitable.

39. Please describe each different measure of State relief used during the late famine or scarcity in your (province, district or charge, according to the grade or status of the witness)? What measures of private relief were also in operation?

40. What opportunities did you have of gaining a practical knowledge or experience of the working of these measures?

41. Which, if any, of these measures were not Code measures, *i.e.*, not authorised by the Local Famine Code as it stood before the famine began?

42. Were any of the Code measures not used in the late famine, or abandoned after trial?

43. In working Code measures of relief, what material departures were made in practice from the detailed provisions provided for such measures in the local Code? Please to answer this separately for each measure, and explain the reasons for the departures, and give your opinion as to their sufficiency.

44. State the comparative advantages and disadvantages of each measure you have seen used (A) primarily with regard to relief of distress and saving of human life, (B) secondarily, with regard to economy.

45. Can you suggest any improvement of the measures you have seen used, or any other measures which you think ought to have been used; or which ought to be tried in the case of future famines or scarcities?

46. State the particular combination of measures which you would recommend, with regard to both the considerations mentioned in the penultimate question for the tract liable to famine which you know best.

47. If you know any other tract or tracts liable to famine for which some other combination would be better, please describe those tracts, and the combinations you have in mind.

48. Which measures were most approved by the general opinion (A) of the different classes in distress; (B) of the intelligent natives not themselves in need of relief?

49. Have you any other criticisms to express on the measures of relief used in the recent famine; or any other recommendations or opinions to advance which you think may prove useful in the case of future famines?

As to relief works.

I.—Extent to which works of public utility may be available as relief works.

* 50. State the number of relief works charges under the Public Works Department and Civil officers, respectively, at the time when attendance on relief works was a maximum, under each of the following classes:—

(*a*) Roads.
(*b*) Village tanks.
(*c*) Impounding reservoirs.
(*d*) Canals.
(*e*) Railways or tramroads.
(*f*) Miscellaneous works.

* 51. What was the total length in miles of new roads constructed as famine relief works—

(i) unmetalled,
(ii) metalled.

52. What do you estimate as the average number of day units of labour that can be employed per mile of each class of road, the work in the case of (ii) including the collection and consolidation of metalling, and collection of a reserve supply for five years?

53. Do you think that all the roads constructed as relief works will be of permanent service to the community, and that they will be effectively maintained in future, or that they will probably be abandoned as soon as they fall into disrepair?

54. If the roads now constructed are all regularly maintained, do you consider that there will still be room for new

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NOTE.—Questions marked with an asterisk (*) may be answered by one officer specially deputed for the purpose, or, if the Local Government prefers, the information may be given in the final famine report of the Province.

roads, should it be necessary a few years hence to open relief works ; and if so, what length of new roads could be proposed in the districts principally affected in the late famine ?

55. What is your opinion of the value of metal collection as a means of employment of relief labour ?

56. Has metal been collected for existing or projected roads in the late famine in excess of probable requirements for the next five or ten years ?

57. What is your opinion of the value of village tanks as a form of relief work—

(i) as a means of employment of relief labour ;

(ii) as a means of permanently benefitting the villages in which they are constructed ?

* 58. What is the total number of village tanks that have been excavated or deepened or enlarged as relief works under Public Works and Civil agency, and the approximate number of day units employed ?

59. What was the average number of workers for whom employment could daily be provided in a satisfactory way on an ordinary village tank ? Can you make any suggestion for securing strict supervision over small and necessarily scattered tank works, or for preventing the whole population of the village from applying for work on the tank because it is at their doors ?

60. Has the number of possible village tanks been exhausted by the recent famine works, or can we rely upon again being able to employ large numbers on such works on the recurrence of famine, say within 20 years ?

61. In what districts have impounding reservoirs been constructed ?

62. Can such works in these districts be regarded as in any way a protection against famine, or as increasing the powers of resistance against famine of the community for whose benefit they are constructed ?

63. Is there a prospect that many impounding reservoirs could be advantageously constructed in these districts as relief works in future famines, if projects were deliberately investigated beforehand, and on the assumption that the cost of their construction must in any case be expended in some form or another, for the purpose of relieving distress ?

* 64. What irrigation works, other than impounding reservoirs, have been constructed as relief works during the late famine, and what has been the approximate expenditure incurred on them as relief works ?

* 65. What expenditure will be required on them, on sub-heads of construction (such as land, masonry works, etc.), that are of little use for purposes of relief works, before the works can be completed and made available for irrigation ?

* 66. What is the area that these works may be expected to irrigate usually in ordinary years, and will the area that may be anticipated in years of drought be greater or less than may be expected in ordinary years ?

If any such works were constructed in former famines, have the anticipations of their utility been fulfilled ?

67. Do you know of any irrigation projects that can be usefully investigated with the object of providing employment for relief labour in future famines, and with the prospect that the cost of maintenance will be covered by an increase in the revenue that may be attributable, either directly or indirectly, to the works proposed ?

* 68. Under what arrangements with the Railway administration interested have feeder railways or tramways been undertaken as relief works.

* 69. Generally, do you think it would be possible, after careful investigation by competent officers, to prepare a programme of large and useful public works that might be put in hand in future famines in preference to petty works, such as have been carried out during the recent famine, the conditions being—

(*a*) That much of the expenditure on such portions of the work as can be carried out by relief labour will have to be incurred in any case for the purpose of affording adequate relief to the distressed population, and that, if not incurred on the works proposed, will be incurred on others of a less useful character.

(*b*) That the cost of future maintenance of the work will either be covered by the gross revenue that may be expected from it, or, if the work will not produce revenue, will not be out of proportion to the public benefits anticipated from its construction, or beyond the means of the authority that will be responsible for such maintenance.

(*c*) That the completion of the work will not involve an expenditure on materials or other items out of all proportion to the expenditure to be incurred on items that can be carried out by relief works, except when the work, as a whole, is likely to prove remunerative, or when its execution sooner or later has been decided on, in the interests of the public, and without reference to the necessity for providing employment for relief labourers.

70. What are the provisions of the Provincial Famine Code regarding the maintenance of a programme in each district of famine relief works, with sanctioned plans and estimates ? Has the Code been in practice observed, and were plans and estimates for the works entered in the district programmes ready prepared when distress appeared ? If plans and estimates were not ready, what was the reason ?

II.—As to large and small works, and the distance test.

71. What, in your opinion, is the greatest distance at which the distressed inhabitants of a village may be induced to attend relief works—

(*a*) when they return every night to their villages ;

(*b*) when accommodation is provided on the relief works ?

72. Do you think it would be practicable to withhold relief from all fairly able-bodied labourers who refused to attend relief works at the distances stated in reply to the last question ?

73. Would you recommend conveying relief labourers long distances of over 100 miles by rail or steamer to any large public works on which there is a strong demand for labour, or in which their labour could be very usefully employed, in preference to employing them near to their own homes on petty works of little use to any one, and the construction of which would never be contemplated, except for the purpose of affording employment for distressed labourers ?

74. In the late famine has residence on the works been the rule or the exception ?

75. Has residence been made a definite condition of relief, or has it incidentally resulted from the small number of relief works open and the distance of them from the homes of the majority of the workers ?

76. Are you in favour of making residence obligatory, or of indirectly inducing it by concentrating the works ? Have you any evidence that when such a test is not enforced, the relief works attract many persons not actually requiring relief ? Do you consider that a high task and low rate of wage are in themselves sufficient tests ?

77. Is residence on the works so distasteful to the people that they will undergo extreme privation before they submit to it ? Can you point to any instances in which this feeling has prevented relief offered under condition of residence from being effectual ? Or any in which it has passed away or become less intense after a short trial ?

77A. Within your own observation is the objection to go long distances for work or to reside on relief works so strong in particular localities or with particular tribes or castes as to prevent relief offered under such conditions from being effective ?

78. If famine were widespread in the province, would the disposable establishments be large enough to supervise works so numerous and so arranged as to allow the majority of the workers to return daily to their homes ?

79. To enable relief workers to come to a relief work daily from homes several miles distant and yet to earn the full famine wage, have reductions for "distance" been made in the task of such persons ? Refer the Commission to the rules (if any) on the subject, and explain how they were

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worked. Were such "reductions" allowed when hutting accommodation was provided on the works? What precautions were possible to prevent distance being overstated, especially in the case of those who did not return to their homes every night, but found shelter in adjacent villages?

80. What was the cost of hutting accommodation per worker?

81. Did the cold and discomfort attendant on residence on the works affect the health of the people?

82. Was it necessary to provide blankets and bedding for the people in consequence of residence being enforced?

83. Is the proportion of "dependants" relieved on the relief works less when works are small and numerous than when they are large and few? How do you account for this?

*III.—Task-work and piece-work.**

84. What was the proportion of labourers employed on task-work and piece-work, respectively, on the relief works under your charge, during the late famine?

85. Are you of opinion that piece-work is suitable for the employment of relief labourers in all cases?

86. If not in all cases, do you think that it is suitable in any? If so, specify the conditions under which you would generally recommend its introduction.

87. Do you consider the objections taken by the Famine Commission (paragraph 133) to piece-work as the predominant form of relief on works are overstated, or can be removed or lessened by administrative expedients? Or that they are on the whole less important than those which in your experience may be urged against task-work?

88. What arrangements would you recommend on works carried out under the piece-work system for labourers who might be too weak or incompetent to earn a subsistence wage at the rates offered, but are nevertheless not sufficiently helpless to be proper recipients of gratuitous relief, either on the works or in their own villages?

89. Would you propose any arrangements limiting the amounts to be earned on piece-work by expert and able-bodied labourers who might be able to execute far higher tasks than those assumed as the basis for the piece-work rates? If so, state what arrangements you would propose.

90. What is the size of the party to which you would make single payments for the work done, *e.g.*, in the case of earthwork how many diggers, with their own complement of carriers, would you put into one gang, or what would be the average number of diggers and carriers together forming a gang, and to whom a single payment should be made?

91. Are you of opinion that if payment for work done is made to the head of such a gang, as is referred to in the previous question, the amount paid will fairly be distributed by him among the members of the gang? Have complaints of unequal or unfair distribution been common when this system has been adopted?

92. Can you give any idea of the reduction that may be made, both in numbers and cost of special establishment, by the substitution of piece-work for task-work?

93. Do you think there would generally be any difficulty in inducing the people to attend works on the piece-work system if works on the task-work system have not been previously opened?

94. What is in your opinion the most convenient system of classifying relief labourers when employed on task-work?

95. What wage would you propose for each class in terms of the grain staple in general consumption by the classes from which labourers are drawn, expressed in *chataks?*

96. Is it necessary to maintain the alternative system given in the Famine Codes under which wages may be calculated according to the cost of the component parts of a day's ration?

96A. Would you propose a different task and wage for men and women within the same class?

97. How would you classify, task and remunerate children—

(i) above 12 years of age,

(ii) below ditto.

98. What do you consider the minimum age at which children should be employed as workers?

99. What penalties would you propose for labourers who fail to perform the task set them, and how would you enforce them?

100. Are the present restrictions as to fining below the minimum wage necessary or expedient?

101. Have considerable bodies of relief workers been on the minimum or D wage for a continuous period? Has it resulted in enfeebled health?

102. Are you in favour of allowing all labourers to earn something in addition to the normal wage proposed in your reply to question 12 in the performance of a task in excess of the normal?

103. Are you in favour of paying a wage on Sundays, or one rest day in seven, and if allowed, what condition as to previous attendance would you propose as entitling to a rest day wage?

104. Do you consider it possible to introduce a standard task for all carriers as suggested in paragraphs 9 and 10 and in Appendix I of Mr. Higham's Report on the Management of Relief Works?

105. Do you think that the formula proposed in Appendix I of Mr. Higham's Report for determining a *reduced level*, in which allowance is made for the initial effort in each trip, for the vertical lift, and for the actual horizontal level is one that may be generally accepted for the purpose of a measure of the work done by carriers. If not, what modification of the formula would you propose?

106. Assuming that the reduced level is calculated as proposed in Mr. Higham's formula, or in any modified form of it that you may prefer, what is the *duty* that you would assign to an ordinary famine carrier, the *duty* being the number of cubic feet carried in a day multiplied by the reduced level in lineal feet, the value suggested by Mr. Higham being 10,000?

107. Do you think it possible to instruct the works establishment ordinarily available on relief works to arrange for the disposition of labour so as to secure, at all times, the best proportion of carriers to diggers, that may be possible under the circumstances; diggers being made to carry when the proportion of carriers is too low, and carriers being as far as possible employed in digging, even with reduced tasks, when carriers are in excess?

108. What is in your opinion the best unit for task work, that is, the size of the party to whom a given task is allotted and all the members of which should be liable to fine if the task is not performed?

109. Do you know anything of what is called the Black-wood system, and do you consider it preferable to ordinary task-work or to piece-work? If so, state your reasons? (For Bengal only.)

110. Have you had an experience in what has been called the modified intermediate system, and if so, do you consider it preferable to task-work under the system laid down in North-Western Provinces Circular No. 18, dated 5th December 1896, or to piece-work in which payment is made to the head of a working party simply with reference to the quantity of work done, and without any reference whatever to the constitution of the party? (North-Western Provinces only.)

111. If you consider this system preferable to the others, would you advocate its adoption on all relief works, whatever the degree of the distress? If you consider it inapplicable in districts in which the distress is very acute, please state your reasons? (North-Western Provinces only.)

112. In what proportion have the adult male workers stood to the women and children? Has it varied greatly in different districts and in the same districts at different periods? Has the proportion differed in the same district and at the same point of time on task-work and piece-work?

113. Can you account for the great preponderance of women and children on the relief works when these exceeded two-thirds of the whole number? Did the adult males find private employment at wages in excess of the famine wage? If so, was it really necessary for the State to support their wives and children?

113A. When failure of crops has caused great rise of prices and expectation of famine in a district, but its circum-

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* It is desirable that the witnesses should have read the recommendations contained in Mr. Higham's Final Note. Questions 84 to 93 are intended only for witnesses who have had experience of piece-work.

stances are such as not to justify the opening of relief works or even of test works, is it good policy to at once arrange for special employment of labour by the Public Works Department on ordinary terms? Would such action enable large numbers of labourers to retain longer their independence and their full working power, and in that way would it stave off the time when large numbers become so pinched that private charity and mutual help cease, and famine relief becomes a necessity?

113B. After a famine has been ended by good crops and a fall of prices, is it sometimes advisable to make provision for special employment of labour by the Public Works Department on ordinary terms in order to assist the very poor who have been left without resources, till a continuance of better times has completely restored them to their normal condition?

113C. Under existing rules of account would expenditure incurred in the cases and under the conditions described in the two preceding questions be met from the budget provision for ordinary public works, or would it be charged to Famine Relief?

113D. Have you any suggestions to make with a view to giving more precision to the summary of "Principles for regulating expenditure upon public works in time of famine," circulated to Local Governments by the Government of India's Famine Circular No. 16—104-1 F., dated 13th February 1897, or have you any criticisms to offer?

IV.—Relations of Civil and Public Works Officers in connection with the management of relief works.

114. Can you define the classes of relief works which may in your opinion be most conveniently carried out by Civil and Public Works officers respectively?

115. What powers of control, if any, do you think should be exercised by the Collector and Commissioner, respectively, in regard to the management of relief works which have been entrusted to the Public Works Department?

116. In the case of such works what are the matters for which, in your opinion, the Collector and the Executive Engineer, respectively, should be held responsible?

117. Do you think it desirable that any powers of control reserved to the Collector in the case of works carried out under the agency of the Public Works Department should be delegated to or exercised by his Assistants?

118. What class or classes of men do you think most suitable as officers in charge of a relief work camp, it being assumed that the services of all available Public Works officers and subordinates are required for setting out and supervising the work, conducting and checking the measurements, etc., and on the general duties of inspection and control?

119. Do you consider that the officers in charge should, in the case of works carried out by the agency of the Public Works Department, be placed under the direct orders of the officers of that Department?

120. Do you think that the officers of the Public Works Department who are responsible for the execution and inspection of relief works, can or should also undertake the control of all other matters within the relief camp, such as the payment of labour, the conservancy arrangements, the management of kitchens, bazar arrangements, etc.?

121. Do you think it necessary or desirable that either the officers in charge of relief camps, or the inspecting or controlling officers should be vested with magisterial powers for the maintenance of order in the camp, and if so, to what extent?

122. Was there any essential difference between the systems of management adopted on works under Public Works and those under Civil agency?

123. Do you consider that any of the works carried out by the Civil officers might, with advantage, have been transferred to the Public Works Department, or, *vice versâ*, that any works were carried out by the Public Works Department that should have been left in the hands of the Civil authorities?

V.—Other details of management.

*124. At what intervals do you consider that the payments of wages should be made—

(i) to labourers on task-work,

(ii) To those on piece-work?

*125. In the case of task-work, would you adopt the *pice* unit for payments, or pay to the nearest pie, as worked out by the ready reckoner?

*126. Do you recommend that payments should be made by independent cashiers or by the gang muharrirs?

127. Has it been the practice in any works to require *chalan* from civil or village officers before admitting newcomers to the works, and if so, do you consider it a desirable practice? What was done in such cases with labourers presenting themselves without a *chalan*?

128. What is your experience in regard to members of aboriginal hill tribes?

(i) Has there been much difficulty in inducing them to attend the works?

(ii) When on the works, have they worked steadily, carried out their tasks and been amenable to discipline?

129. What are the maximum and minimum number of labourers that should form a single charge?

130. Are you in favour of kitchens in all cases in which relief is given to non-working children? If not, under what circumstances would you recommend cash doles?

*131. What do you consider, as a result of your experience, may be considered a fair ratio to the value of the work done if performed by ordinary labour at the ordinary rates of—

(i) the payments actually made to the labourers employed, including the Sunday or rest day wage;

(ii) the total cost of the work, including relief to dependants and all incidental charges?

And support your opinion bystatements showing the general results of all the operations under your charge?

*132. Have you any suggestions to make on the question of famine accounts and returns?

VIA.—Interference with the supply of labour to private employers.

133. Have you received any complaints from the agents of railway or other public companies, contractors, planters, or other private employers, that the opening of relief works affected the supply of labour which they were desirous of employing? If so, give particulars of the complaints.

(For Government officers only.)

134. Did you think there was any foundation for any of these complaints, and if so, was it possible to do anything to meet them?

135. Were the wages or the rates per unit of work done paid by such employers in excess of the normal wages and rates in ordinary seasons, or did they follow in any way the rise in the price of grain?

136. Do you think the rates paid by the employers were insufficient to enable an ordinary able-bodied family accustomed to labouring on works to earn a bare subsistence at the market rates for grain that obtained?

137. What arrangements, if any, would you propose in future famines to prevent relief works attracting labour that would otherwise go to private employers?

138. Can you say if relief operations were assisted in any way by the employment offered by private employers of all classes to able-bodied workers in their immediate neighbourhood other than professional earth-workers? Are you aware whether any works were undertaken by them with this purpose which but for the existence of distress would have been postponed to more later date, or whether any special efforts were made or facilities afforded with the object of assisting in the relief of distress?

139. Do you think it would be possible in future famines to utilize the agency of private employers in any way for the purpose of providing more extensive employment for the distressed?

VIB.—Interference with the supply of labour to private employers.

140. Do you consider that the supply of labour to the works under your control was injuriously affected by the opening of relief works in the neighbourhood or at a distance?

(For employers of labour only.)

NOTE.—Questions marked(*) may be answered by one officer specially deputed for the purpose, or, if the Local Government prefers, the information may be given in the final famine report of the Province, or in reply to the Government of India's Resolution (Revenue) No. 31, dated 25th October 1897, recorded on Mr. Higham's Report.

141. Did you find it necessary to revise your rates after relief works had been opened? If so, give particulars of the rates before and after the opening of relief works, and compare them with those that you have paid in ordinary seasons for the same class of work.

142. How far from your own works were the relief works which you consider interfered with the supply of labour?

143. Have you made any complaints on the subject to any of the officers connected with relief works, and if so, with what result?

144. Do you consider that the establishment of the relief works complained of was necessary as a means of preserving life, or that without them the people who attended them could have found sufficient employment in your own works and elsewhere to earn at least a bare subsistence for themselves and their dependants?

145. If you consider that Government relief of some kind was necessary, do you think it would have sufficed to give it in some other form than relief works, or to have opened relief works on a different principle from that actually followed? If so, state your views on these points.

146. Do you think that it would have been possible to employ local labour in distressed districts upon works under your control, and to have obviated the necessity for Government relief works in the neighbourhood, if Government could have made arrangements for the rate of grain to all labourers on your works at privileged rates considerably below the market rate?

See paragraph 12 of Mr. Higham's notes on Central Provinces.

147. Have you any other remarks on the subject of relief works that you would like to lay before the Commission?

As to gratuitous relief.

148. What percentage of the population of the affected area was placed on gratuitous relief at the period of maximum pressure?

149. Did the persons so relieved mainly belong to the agricultural classes resident in rural areas?

150. Do you consider that all the persons thus relieved were incapable of work on a relief work, and were without relatives bound, and able to support them, and had no resources of any kind?

151. In ordinary years how are such persons supported, and why should famine or scarcity throw them upon the State for support?

152. Were the persons who received gratuitous relief in their homes chiefly women and children? To what extent did the women belong to the *parda nashin* class?

153. Can any reliable estimate be formed for a given tract of the number of persons requiring gratuitous relief in their homes during an acute famine? Will the numbers vary with the severity and stage of the distress?

154. If the numbers of relief workers attending the relief works open in a district are small, may it be presumed that no great amount of gratuitous relief is required?

155. In some provinces it appears to have been the practice to require the incapable poor who had able-bodied relatives to accompany the latter to the relief works and there to remain as "dependants." Do you approve of this practice as a test of necessity?

156. Would you give gratuitous relief to an incapable person having an able-bodied relative bound to support him, who declines to go on to the relief work?

157. May it be presumed that gratuitous relief at home is very popular with the people, and that it is sought for by many who are not absolutely destitute or who are capable of labour on the relief works?

158. Was the circle and inspection organization at your disposal sufficiently strong, vigilant, and well-informed to restrict gratuitous relief to those who were incapable of work and would otherwise have starved? Describe the precautions taken.

159. Do you think that the successful administration of this form of relief requires a larger staff of supervising officers in the superior grades than any other kind of relief?

160. Does the acceptance of such relief place any social or caste stigma upon the recipient?

161. Does the knowledge that gratuitous relief is given by the State lead to the drying up of private and village charity quicker than would otherwise be the case, and tend to make the people cast their customary obligations for the support of the poor of the locality upon the State?

162. Could some of the persons to whom gratuitous relief was given have been employed on light manual labour on relief works in or near their village?

163. Could such work have been provided by assisting the land-owners of the village to undertake the construction of tanks or roads or other village works?

164. Central kitchens, where cooked food is provided for all comers without any condition as to residence, have by some officers been preferred to gratuitous relief in the homes of the people, at least in the early stages of distress, or when distress is on the wane. What is your opinion on this point?

165. What are the social and caste feelings of the people as to receiving cooked food in State kitchens? Would the substitution of kitchens for gratuitous relief in the form of grain or money doles, practically exclude, on account of these sentiments, certain classes from relief who really need it?

166. Apart from the sentimental difficulty, would it be practicable to maintain a sufficient number of kitchens so as to be within the reach of all persons requiring gratuitous relief?

167. Was gratuitous relief given in the form of grain or of money? Which form do you prefer?

168. Was it given in the actual homes of the people, or were they required to repair periodically to a central place to receive it?

169. Within your observations was there much malversation or extortion on the part of patwaris or other subordinates employed in the distribution of gratuitous relief? Were there any instances in which persons paid money, or surrendered part of the dole, in order to be placed on the gratuitous list?

170. To what extent was the existing revenue or police organization by villages or larger groups utilized in ascertaining the persons requiring home relief and afterwards in distributing such relief, and how far had it to be superseded or supplemented?

171. To what extent was gratuitous relief administered through voluntary unofficial agency?

As to poor-houses.

172. Was the population of the poor-houses in your $\frac{\text{province}}{\text{district}}$ large at any point of time, or continuously so throughout the famine period?

173. From what classes of the community were the inmates chiefly drawn?

174. Did persons of the better castes or of respectable position object to resort to the poor-houses for relief? Would any degree of pressure have induced them to go there?

175. Compared with any experience you may have had in former famines, do you think the people generally showed decreased reluctance in the late famine to accept poor-house relief? If so, to what do you attribute this?

176. Was the mortality of the poor-house population exceptionally high throughout the period, or in any particular months? Can you account for this?

177. To what extent were the inmates of the poor-houses persons who had wandered from other districts within the province, or from other provinces, or from Native States?

178. From the physical condition of the persons entering the poor-houses and the distances they had come, what opinion did you form as to the severity of the famine, and the degree to which it had broken up households and caused wandering?

179. Were any measures taken to keep down the population of the poor-houses by drafting to works or to their homes all who could properly be thus disposed of? Was this systematically or spasmodically done?

180. Is the poor-house ration prescribed by the Famine Code sufficient? Had the dietary to be varied in the case of weak and sickly persons?

181. Are the rules and appendices of the Famine Code as to the management of poor-houses sufficiently explicit and detailed, and in all respects suitable? Can you point out any defects in them and suggest improvements?

182. Are legal powers required to enable relief officers or district authorities to send persons found begging and wanderers without any means of support and persons who, being able, refuse to work at the relief works, to poor-houses, and to detain them there? Was compulsion in this direction in practice used?

183. Were endeavours made to get work out of poor-house inmates, and with what degree of success?

184. Had any compulsion to be used to detain persons in the poor-houses? Were the inmates free to leave when they chose? Were the departures or escapes numerous?

As to relief centres.

185. Was it found necessary to open relief centres where doles of grain or money were distributed, as an alternative to giving similar relief in the homes of the people? Under what circumstances was this necessary?

186. When relief centres were thus established, was work exacted as a condition of relief from able-bodied persons? What kind of work was exacted?

187. Did the attendance at relief centres tend to become unmanageably large? Was the collection of large numbers of persons at such centres found to be productive of epidemic disease?

188. Does the expedient of relief centres as a substitute for village relief and an organized system of relief works in the early stages of distress commend itself to you?

189. In your experience would it have been better to have completed the village relief arrangements and to have opened regular relief works at an earlier date than was actually the case, in localities where relief centres were resorted to?

190. Are there any special tracts of country or any particular conditions of the population which make relief centres preferable to village inspection and village relief and to regular relief works?

191. Approximately what area was a relief centre expected to serve?

192. Was voluntary unofficial agency available and utilised to any large extent in the working of relief centres?

As to relief kitchens.

193. What is your view of the functions of relief kitchens at which cooked food is supplied to destitute persons without the condition of residence?

194. Are they required chiefly in connection with relief works for the non-working children and other dependants of relief workers, or may they advantageously be established elsewhere for the relief generally of the incapable poor?

195. At the beginning or end of a famine to what extent is it expedient to substitute kitchens for gratuitous relief in the houses of the people?

196. Was cooked food given at the relief kitchens to all applicants, or only to those furnished with a kitchen ticket by an officer or village headman?

197. When such kitchens became numerous, was strict supervision over the persons in charge difficult to maintain? Was there waste or misapplication of food? What arrangements to prevent this were made? Were the kitchens ordinarily placed under the direct charge of officials, or of zamindars and other private persons?

198. Is it preferable to relieve the non-working children and other "dependants" of relief workers by means of cooked food, or by money doles to the parents? In your experience could parents to whom money was given for this object be trusted to expend it on their children?

As to loans to cultivators and land-holders.

199. To what extent have State advances been made to land-owners and cultivators for land improvements, for seed-grain and cattle, and for subsistence, in the late famine?

200. In the case of money advanced for land improvements, have the recipients, as a rule, spent it on the object for which it was lent, namely, on the employment of labour? Or have they otherwise utilised it?

201. Have the sums advanced for cattle and seed been of much benefit to the cultivating classes? Could more money have thus been advantageously spent?

202. What periods for recovery have been fixed for the different classes of advances?

203. Have advances been given to land-owners and cultivators for purchase of food, and under what restrictions as to the amount advanced and as to the time of the year in which the advance was made?

204. Do you approve of the principle of such subsistence advances, or do you think that cultivators requiring money for food should be required to submit to the self-acting test of accepting work on a relief work?

205. Is it more economical to aid by such advances cultivators who possess some property in land and cattle than to offer them work and wages?

206. Would not every cultivator want to borrow instead of going to the relief works, and would not this mean a very large outlay by the State on loans, and an increase of indebtedness among the cultivators?

As to suspensions and remissions of land-revenue.

207. To what extent has land-revenue been suspended or remitted in the parts of your $\frac{\text{province}}{\text{district}}$ affected by the late famine?

208. Have measures been taken to secure that the relief thus given reached the cultivating tenant? Does the law provide for this? If not, is legal provision desirable?

209. Has this form of relief been of much advantage to the land-owning and cultivating classes? To what extent has it kept them from the relief works, or tended to prevent them from falling into debt?

210. Do you think that the land-revenue which has been suspended and not remitted will be recovered without pressing severely on the land-holders, should seasons be good?

211. Will such recovery be spread over several seasons by means of instalments?—Will the corresponding rent suspended be distributed in similar instalments?

212. Does suspended rent carry interest? If so, ought it to do so?

213. Has the Government power to direct suspension of rent on estates held free of land-revenue, when it directs suspensions of rent and revenue on revenue-paying estates? Is such power necessary?

214. In regard to suspension and remission of land-revenue in temporarily-settled tracts, do you think it might with advantage be made a general rule of practice that in regard to estates held by self-cultivating as distinct from rent-receiving owners, when the crop is reported to be, say, below a 4-anna one, and only sufficient to feed and clothe the owners and their dependants and cattle, the proper treatment is immediate remission, not suspension?

215. Can you form any idea to what extent the private indebtedness of the land-owning and cultivating classes has been increased through the famine? Do the stamp or registration receipts indicate increased borrowing and more transfers of land? Has the borrowing in many cases been on a scale which must involve ultimate ruin to the borrower?

As to the use made of forests.

216. What measures were taken to open State and private forests to the people for grazing, or for collection of grass or leaves, or of edible fruits, roots and grass seeds; and what was the effect of such measures?

217. Do you think that the forests might have been more fully made available for these purposes than was the case?

218. Were any departmental operations undertaken for collection and despatch of compressed grass to the distressed tracts, and with what result?

219. What kind of food do the people get out of the forests?

As to orphans.

220. How should orphans who have been maintained by the State during famine be disposed of at the end of a famine?

221. In the case of orphans who, during the famine, have been temporarily made over by the relief officers to private orphanages and payment made by the State for their support, should the Government continue its aid to the private orphanages after the famine?

As to private charitable relief as auxiliary to state relief.

222. Have you any suggestions to offer regarding the statement of the objects to which private subscriptions for relief of distress caused by famine may legitimately be applied as set forth in the *Gazette of India* of 9th January 1897.

223. Do you think any of these objects trench upon the field of Government relief operations?

224. In view of the fact that during the currency of a famine the Government makes itself responsible as far as may be practicable for the saving of life by all available means in its power, do you consider the statement of the second object satisfactory; if not, how should it be modified?

225. Do you think the second object could properly be restricted (*a*) to the giving of clothing and other extra comforts to the orphans, and (*b*) to meeting the cost of their education in some useful craft befitting their station in life and of their maintenance after the end of the famine?

226. Are any special rules or measures necessary to prevent overlapping of charitable and Government relief under Object III; if so, what would you suggest?

227. Do you consider the opening of grain shops, where wholesome food-grains would be sold at rates below the prevailing market rates, a legitimate method of giving relief to respectable persons with small fixed incomes who, though suffering great privations from abnormal rise in prices, would not accept purely gratuitous relief either from Government or from the Charity Fund?

228. Is the opening of these cheap grain shops likely to interfere with private trade, provided the benefit of them be extended only to a selected number of persons? Were such shops started in your district, and did they interfere with private trade?

229. Are you aware that the opening of these shops from the Indian Famine Charitable Relief Fund operated to steady the market and to prevent fitful raising of rates?

230. To render the help effective, do you think that the relief to broken-down agriculturists should not be confined to the period when acute distress is subsiding, but that it should be given just before the commencement of the agricultural season, even though distress might then be at its height?

231. What class of agriculturists should generally be helped under Object IV?

232. Do you think the Charity Fund could be properly applied in relieving agriculturists who are in a position to get statutory loans (*takavi*) from the Government?

233. Do you think it could be usefully spent in supplementing *takavi* advances where they are not enough to meet all the agricultural requirements of the recipient, including the subsistence of himself and his family, during the interval between the sowing and the harvest?

234. Do you consider the operations of the Indian Famine Charitable Relief Fund as supplementary to Government relief have served a useful purpose; if so, in what way?

235. Can you describe briefly the nature and the extent of the relief granted from the Charity Fund in your province?

236. Can you give the number of persons relieved under each object in your province?

237. What form of relief under Object I was the most popular and evoked the greatest gratitude?

238. What form of relief under Object III did the greatest amount of good at the smallest cost to the fund?

239. Do you think it was right to spend the bulk of the fund in helping broken-down agriculturists?

240. Do you think the expenditure of such a large portion of the fund under this head has, besides doing substantial good to the persons helped, resulted in great economic advantage to the country generally?

241. Can you state what is the approximate area sown with aid from the Charity Fund in your province?

As to Emigrants and Wanderers.

242. What arrangements were made for the relief of starving wanderers? Were the numbers of such wanderers so large as to attract attention? If so, to what causes was their presence due?

243. Would there have been so much wandering had more works been opened or village relief or relief centres more largely extended? Is it possible by any relief methods to prevent jungle people, or people with whom it is a custom to migrate at certain seasons of the year, from wandering?

244. Was the death-rate of the $\frac{\text{province}}{\text{district}}$ sensibly affected by deaths among wanderers in poor-houses or on relief-works?

245. Were the wanderers persons ordinarily residing within your $\frac{\text{province}}{\text{district}}$, or were they from others $\frac{\text{provinces}}{\text{districts}}$, or from Native States? If from other $\frac{\text{provinces}}{\text{districts}}$ or from Native States, why were they attracted to your $\frac{\text{province}}{\text{district}}$?

246. Was any difference made in the treatment of wanderers from your own $\frac{\text{province}}{\text{district}}$ and those coming from other $\frac{\text{provinces}}{\text{districts}}$ or from Native States?

247. How do you think wanderers or emigrants from other $\frac{\text{provinces}}{\text{districts}}$ or from Native States should be dealt with?

As to the mortality during the famine period.

248. What was the ratio of deaths per thousand of population in the famine area of your $\frac{\text{province}}{\text{district}}$ for the five-year period 1891-95 preceding the famine? What was this ratio during 1896 and 1897?

249. How far has the higher ratio in the latter two years been due directly to scarcity of food, or to the indirect effects of such scarcity?

250. If, in spite of the privations consequent on scarcity of food, there has been little or no increase in the ratio of mortality, do you attribute this result entirely to the success with which the distress has been met by relief measures?

251. In dry years, unaccompanied by scarcity, the health of the people, it is believed, is ordinarily very good and the mortality abnormally low? The year 1896 was an exceptionally dry year, and as a consequence the mortality would presumably, under ordinary circumstances, have been below the average; would it not seem reasonable to attribute to causes connected with scarcity not only all mortality in excess of the normal death-rate, but also the difference between the abnormally low death-rate of a year of light scanty rainfall and the normal death-rate of years of ordinary rainfall? Would not the compensating influence on the public health resulting from exceptional dryness of season tend to mask the full effects of scarcity of food?

252. On the other hand, an abnormally dry season often results in a short supply of potable water as well as to a concentration of impurities in such supply; do you attribute any part of the excessive mortality during the period of famine to this cause of unhealthiness? Do you think that cholera may have been originated or intensified by this cause?

253. Prevalence of bowel-complaints, dysentery and diarrhœa in communities leads to a suspicion that the food-supply is insufficient, or unwholesome or badly cooked. Did these diseases cause a high mortality in the famine area of your $\frac{\text{province}}{\text{district}}$, and could their prevalence be ascribed to an insufficient or unwholesome dietary?

254. Do you consider the diet supplied to the different classes of relief-workers, to the poor-house inmates and to those fed at the kitchens, to have been sufficient to maintain the recipients in health? Would you, as a result of your own observations, suggest any alteration in the scale of diet laid down in the Famine Code?

255. Can you state the number of deaths which were directly due to starvation in your $\frac{\text{province}}{\text{district}}$ during the famine? Also the number of those who died indirectly from privation? Was the mortality greater amongst women than amongst men, and amongst children and the aged than amongst adults? Did parents frequently, under stress of want, neglect or abandon their children?

256. Of the deaths due to starvation, how many can you enumerate which could have been prevented by the timely

intervention of the State? Explain, if you can, how in these cases the relief measures adopted by the State failed in saving life?

257. Were, in your opinion, the measures of State relief defective either in principle or in their working? Do you think the mortality amongst the people in receipt of State aid was to any extent due to insanitary conditions prevailing in the relief camps, poor-houses, and food kitchens, and can you make any proposals with the object of securing improved sanitary conditions in future famines? Was every practicable precaution taken to provide and protect against contamination pure water-supplies for relief-camps and poor-houses?

258. Was the staff of Medical Officers and Hospital Subordinates sufficient during the famine, and were they provided with an adequate supply of medicines and medical comforts for the use of the sick?

AS TO THE PRESSURE OF POPULATION.

259. Has the population of your $\frac{\text{province}}{\text{district}}$ increased since the taking of the census of 1871? If so, will you state what this increase has been from 1871 up to the end of 1896, this latter being probably the latest year for which the complete figures are available?

260. Is there any evidence of a continuous increase in the birth-rate or decrease in the death-rate?

261. What has the average increase of population been per cent. per annum for each year included in the period mentioned?

262. Do you attribute this increase solely to the natural and unrestrained fecundity of the people, or are there other, and if so what, additional causes?

263. What effect on the growth of population in India would you assign to the enduring peace maintained within our borders, to the suppression of infanticide and widow-burning, to sanitary works and improvements, to the extension of vaccination, and to the strenuous endeavour to prevent the loss of a single life in periodically recurring famines?

264. Has the area under food-grains in your $\frac{\text{province}}{\text{district}}$ increased *pari passu* with the increase of population? Or has the food-producing capacity of the $\frac{\text{province}}{\text{district}}$ been increased by irrigation and improved methods of cultivation at a rate sufficient to meet the wants of the increasing population?

265. What importance do you assign to this growth of population in bringing about in ordinary years an increase in the price of food, and so rendering existence more difficult and precarious?

266. Have the wages of the labouring classes increased as rapidly as the prices of their food-stuffs?

267. Are increase of population and higher prices, unaccompanied by a corresponding rise in the wages of the working classes, indications of diminished stocks of food in the country? Would scarcity be likely to intensify more rapidly into actual famine under conditions of dearer food and a greater number of people earning low wages?

268. The immediate effects of irrigation works and improved methods of cultivation being assumed to increase the production of food for man and beast, what, in your opinion, would their more remote effects be? Would they in a population of great fecundity and exercising no restraint on such fecundity, tend to cause the people again to multiply up to the limit beyond which the soil could not further support them?

269. How would you propose to obviate this tendency of the growth of population to press close upon the amount of food available for its support?

270. In England we know that the same problem has been solved by emigration to lands in need of population. Could the same solution be applied to India?

271. In England, unrestrained fecundity is confined mainly to the lower and more ignorant classes. The educated classes, with certain exceptions, exercise control and foresight with regard to the number of children they bring into the world. Is education, within a measurable period of time, likely to pervade the millions of India to such an extent as to lead them to practise similar control and prevision?

272. Irrigation, we assume, increases the productiveness of the soil; it is also acknowledged to be concerned in the generation of malaria in many extensive tracts of the country. Malaria, we have proof, lessens the fecundity of the people. Do these facts suggest to you the involuntary establishment of an equilibrium between the population and the food production of irrigated tracts? Would such equilibrium, brought about in the way which these facts suggest, be a result to be desired?

AS TO THE ORDINARY FOOD OF THE PEOPLE.

273. In the tracts liable to famine in your $\frac{\text{province}}{\text{district}}$, which are the food-grains ordinarily used in their homes by well-to-do labourers and artizans? Please answer separately, if necessary, for town and country and for winter and summer.

274. How many meals do they eat in the day, and of what eatables and drinkables does each meal ordinarily consist?

275. If any of the ordinary food-grains happen to be unprocurable, what other grains do they sometimes substitute.

276. Of these occasional substitutes, which do the people consider most and which least palatable and digestible?

277. What do they say in objection to other grains which might probably be substituted, but which they practically never use?

278. What food-grains were used in poor-houses and kitchens, and at relief works under your observation during the recent famine?

279. How many meals a day did the people get in poor-houses and kitchens, and of what eatables and drinkables did each meal consist?

280. What sort of complaints were made as to the kind of food or plan of meals?

281. How does the diet given at famine relief poor-houses and kitchens compare with the authorized scale of prison diet?

AS TO FOOD-STOCK AND PRICES.

282. Was the great rise in prices of the common food-grains, which occurred in September to November 1896, and was more or less maintained for the next twelve months, in your opinion a reasonable rise? That is to say, was it fairly proportionate to the failure of harvests, lowness of local stocks, and cost of replenishing them? If you think the rise was more than reasonable, to what do you attribute it?

282A. In market towns which came under your observation, was it possible to identify the persons who fixed the bazaar or current rates of food-grains declared from time to time? How far were these current rates strictly followed by the local retail traders?

283. Do you think that the depreciation of the rupee in relation to gold which has been going on has any effect in the direction of making prices of food-grains jump up quicker and higher than formerly when crop failures occur? Has there been a permanent rise in the average price of food-grains in India within the last twenty years? Has the rise been greater in respect of some kinds of grain than of others?

283A. What was the difference in prices prevailing in the distressed area under your observation, and in prices in neighbouring districts where the crops had not failed to such extent as to make relief necessary? Did the difference appear natural and reasonable in degree?

284. What material fluctuations of prices of grain occurred in the 12 months after 1st November 1896 in the distressed area under your observation? To what did they seem due, and was the trade sensitive? That is, did grain flow in quickly and freely in response to each rise of price from accessible markets where prices were lower? If not, state what in your opinion were the reasons or obstacles which impeded the activity of trade?

285. In the distressed districts under your observation, could the towns-people and villagers, who had money but no private stocks of their own, at all times buy their customary food-grains and condiments at the rates quoted in the nearest grain marts, or had they sometimes to pay much higher?

286. Were the people in receipt of relief in the shape of cash at works or in the village, always able to buy grain at the rates supposed to be current?

287. Were food-grains of the common kinds exported from distressed tracts under your observation while the high prices prevailed? If so, was this due to still higher prices elsewhere, or to want of capital for large purchases in distressed tracts or some other reason?

288. Were fortunes made in the grain trade during the high prices? If so, by what classes and by what sort of trade or speculation? Was it genuine buying to put on the market, or of the nature of time bargain or speculation for a rise?

289. Were the grain pits or godowns of the grain dealers for the most part opened and largely depleted at the close of the distress, or were many unopened and most but little depleted?

290. In distressed tracts under your observation had any of the cultivators and land-owners what may be considered surplus private stocks of food-grain? If so, did they generally sell such surplus or hold up all they had from panic or other reasons?

291. While the high prices prevailed, did those cultivators, who had grain to sell to dealers, get prices as proportionately higher than usual as those the grain-dealers were selling at?

292. Were the wholesale dealings between grain-dealers at prices as near to retail prices as they usually are?

293. To what extent has the habit of storing food-grains in pits or other receptacles diminished among the grain dealers, landholders and cultivators of the tracts producing large crops of the common grains? What are the reasons for such diminution?

294. In such tracts have the railways and roads extended into them had the effect of stimulating the export of the annual surplus production to sea-ports and to rich districts where more valuable crops are produced? When crops fail and prices go up in such tracts, is private trade ready to import freely into them?

295. To what extent were proprietors of land, State rayyats and under-tenants among the classes which asked for and got relief?

296. To what classes did the mass of persons relieved belong?

297. To what was the inability of the distressed people to buy grain at the high prices principally due? Did non-agricultural employment of labour fall off as much as agricultural employment?

298. Did wages of any class of labourers, artizans, or servants go up in any degree in consequence of the rise of prices? If not, why not?

299. Has competition of foreign goods or of goods produced by Indian Mills seriously reduced the purchasing power of any class of artizans or labourers in the tracts under your observation?

300. Can you compare recent with former famines, and say whether the different classes of people seemed this time to have more or less power of resisting destitution?

301. Do you observe any change in their attitude of reluctance to go to poor-houses or to relief-works?

302. Did they sell jewelry, brass pots, and cattle, as much as formerly? Did fall in value of silver jewelry make them reluctant to sell it?

303. What action, if any, was taken by officers of Government in the affected area under your observation to encourage importation of food-grains, or otherwise stimulate the activity of private trade? What was the result for good or bad of such action?

303A. What action was taken, if any, in any locality under your observation to supplement or stimulate activity of local grain-dealers in importing food-grain? What was the result?

304. Suppose that instead of relying entirely upon the action of private trade and the Indian market, the Government had resolved to import grain from abroad to a notified amount and for a strictly limited purpose, that is, for use at a large number of its poor-houses, kitchens, and relief works: suppose also that Government so imported either directly or through contractors, and adopted all possible precautions against obstructing the movements of private trade: what effect in your opinion would such action have had (1) on the cost of relief to the State; (2) on the prices of food-grains in the bazars or open markets; (3) on the activity of private trade?

305. In the districts under your observation had you ever good reason to believe in the existence of local rings of grain-dealers formed to keep up prices of food-grains above the rates naturally resulting from the law of supply and demand? If so, how far did such rings succeed in their purpose, and for how long?

If you think such rings can be successfully formed at the present day in India, can you suggest any legitimate method of breaking them, which would in your opinion have the desired effect, and be on the whole distinctly advantageous?

305A. Outside India under the Viceroy, what countries are there from which considerable stocks of food-grains suitable for Indian use could be got if wanted? If stocks of food-grains were unusually low in the Indian Empire and prices generally very high, would you favour import by Government of large quantities of grain from such countries to supply in whole or part its poor-houses and relief works? What would be the probable advantages and disadvantages of such a measure in your opinion?

REGARDING THE GRAIN TRADE*.

306. How far and in what ways was the export by sea of the various food-grains affected by the famine and scarcity?

307. How far and in what ways was the export by sea of other commodities affected?

308. How far and in what ways was the import by sea—(1) of food-grains, (2) of other commodities affected?

309. Is there any evidence that a permanent rise in the price of food-grains in India has taken place of late years?

310. If such a rise has occurred, do you think that it is in any way connected with the fall in the Indian exchange?

311. Is the export of food-grains from India in a series of years on such a scale as to materially affect the ability of the country to feed the population, or to materially reduce the reserve stocks held at a particular point of time in the country?

312. In ordinary years is the import of food-grains by sea, for consumption in the port-town and for distribution into the interior, large?

313. Is this trade in the hands of European or native firms?

314. What grains are chiefly imported and from what foreign ports?

315. When prices of food-grains rose rapidly at the end of 1896, were the stocks of rice and other food-grains large in the port?

316. So far as the information went, were food stocks large in the interior of the country, or in any particular province? What was the general impression as to the extent to which these stocks would prove sufficient for the food-requirements of the country without importation from abroad, and would be placed on the market, or held up?

317. Did the high prices reached at the end of 1896 lead to much speculative dealings in grain?

318. Were these high prices maintained? Were they followed by an active import of grain from foreign ports?

319. Did the price of rice in Burma and of wheat and maize in Europe and America rise in consequence of apprehension of diminished food exports from, or of an anticipated demand on account of, India?

320. Were shipments of grain made from American or European ports to India? If they were only on small scale, what was the cause?

321. Was there a sufficient margin at the end of 1896 between the prices of wheat or maize in India and the prices of these grains in Europe and America to make import into India profitable?

322. If such a margin existed, but grain was not imported, what were the obstacles in the way of the establishment of the trade?

323. In ordinary years what quantity of rice does Burma export to India and other countries? Please give figures showing the distribution.

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* NOTE.—These questions are intended for witnesses put forward by the Chambers of Commerce, and for Exports specially invited by the Commission to give evidence.

324. From November 1896 to October 1897 what quantity of Burma rice was imported into this port ?

325. Were these imports mainly for despatch to the interior ?

326. Were the firms on whose account these Burma imports were made chiefly European or native firms ?

327. Were these imports made on the order of up-country grain-dealers for Burma rice, or by Calcutta firms at their own risk in anticipation of the demand of up-country dealers ?

328. Was any difficulty at first experienced in getting up-country grain-dealers to take Burma rice, and did stocks in consequence tend to accumulate and the price to fall in the port.

329. Was there always a profitable margin between rice prices in Burma and here to admit of continuous import here ?

330. It has been stated that in the event of India requiring large imports of grain from America or Europe, European firms at the ports would find more difficulty in engaging in such import trade than in the case of the grain-export trade ; that is to say, the reversal of the ordinary process of trade would be accompanied by special risks and difficulties. Is this so ?

331. The largest export houses have, it is believed, many up-country agents in the interior who place contracts for purchase of grain for export with native grain-dealers. In the event of India requiring to import grain, could not contracts for sales of grain be placed with up-country dealers by the same agency ?

332. Would the ordinary course of trade be for the European importing house to deal with the native firms in the port, and for those firms to place the grain in the up-country markets ? Would the European houses import at their own risk, or only in fulfilment of contracts with native firms ?

333. Within how many days could 20,000 or 30,000 tons of wheat or maize be landed in India from Europe or America after a contract had been placed in this port ?

334. In that interval prices in India might have so fallen as to prevent the importer from making the profit he had anticipated ?

335. Is this contingency one of the causes which might prevent grain from being imported from distant countries to India, in spite of prices being so high for the time being in India as to hold out expectations of considerable profit ?

336. Might there be a serious panic in the Indian grain markets, resulting in dealers refusing to sell or extremely high prices being asked, without its leading to imports from abroad being arranged for ?

337. Do you think that the offer of a bounty on each ton imported, or the direct purchase by Government of grain for feeding the poor on relief works, would have eased the market ? To what extent would any such measure have discouraged private trade ?

338. What would have been the effect in the grain markets of foreign countries of intelligence that the Indian Government was purchasing, or encouraging the importation of grain ? Was the want of activity in the grain import trade from America or Europe in any way due to the dearness of money in India in the winter of 1896-97, and to difficulty in obtaining accommodation ? If so, could Government with advantage have stimulated import by loans or contracts ?

339. The relief workers were paid a cash wage sufficient to enable them to buy a stated quantity of food, the wage varying week by week with the local grain-prices. If Indian food-prices throughout the famine were lower than the price at which grain could be laid down in India from Europe or America, might not importation by Government of food for some of the relief works have made those particular relief operations costlier than they have actually been ?

340. Would this disadvantage have been compensated by a lowering of prices in India, owing to which other relief works would have been less costly, and the public would have been enabled to buy food at lower rates ?

341. If we may suppose that prices would have fallen in consequence of the Government undertaking to import from abroad to feed the relief workers, would this have caused less rice from Burma to have been imported ?

342. What reductions were made in railway rates on grain from the sea-board to the interior, and had such reductions an effect on trade ?

343. Can you think of any possible combination of circumstances under which it would be advisable for the Indian Government to import foreign grain itself for its relief purposes, or to stimulate such import by the trade by loans, contracts, or bounties ?

344. Was there ever a time during the recent famine when Government might, in your opinion, have tried such measures with advantage ?

345. Can you conceive of any case in which prohibition of exports would in your opinion be of advantage ?

G. I. C. P. O.—No. 1086 R. & A.—8-8-98.—3,308.—E. Rose.

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